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ASSESSING THE EFFECTIVENESS OF GORDON ALLPORT'S CONTACT HYPOTHESIS
ABILITY TO INCREASE CULTURAL OPENNESS IN FIRST YEAR COLLEGE STUDENTS

by

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DEDICATION

I dedicate this work with love and affection to my wife and children who have patiently waited for its final completion. After years of getting the answer “I’m almost done” to the question “When are you going to finish?” they can finally hear “I’m done!” Thank you for your loving encouragement and patience.

Abstract

The purpose of this study is to test Gordon Allport's theory of Contact Hypothesis about cultural attitude change in college students. Participants were college First year students participating in First year seminar classes in a small southeastern liberal arts university. The treatment group of randomly selected First year seminar classes was exposed to a one-week seminar designed to address the issue of cultural diversity. A non-treatment group received the standard instruction on this issue. The content of the seminar included exposure to multicultural issues that include Allport's most important tenants for changing prejudicial attitudes. For this study components of Allport's Contact Hypothesis was measured using the Quick Discrimination Index designed to assess attitudinal shifts towards racial equality. The QDI was administered early in the semester prior to the one week seminar being introduced and again at the end of the semester. Scores on the QDI are divided into three factors: 1) cognitive attitudes toward racial diversity, 2) affective and personal attitudes as they relate to racial contact, and 3) general attitudes regarding gender equity issues. Pre and post scores were compared and used to address the following questions: 1) Will the one week workshop produce increased levels of cultural openness in the direction predicted by four major tenants of Allport's Contact Hypothesis? 2) Do QDI factor scores differ for augmented treatment versus standard treatment groups? 3) Does an interaction effect exist on post QDI factor scores for students living on campus compared to students who live off campus; between Students

of European descent and Students of color; and between genders? A dramatic result occurred in which all female QDI affect factor scores decreased while all male QDI affect factor scores increased. Only one of the QDI factor scores showed a significant decrease in cultural openness. Females Students of European Descent living off campus experiencing the augmented treatment had a significant decrease in cultural openness in the affective measure.

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CHAPTER 1

Nature and Significance of the Study

This study involves assessing the amount of change in cultural awareness and cultural openness that the first semester of college provides to students attending an institution of higher education. Several studies support the idea that the first year in college provides an increased challenge to students' value and belief systems in the realm of cultural openness of cultural diversity issues. Factors that mediate change in student value and belief systems are the amount and type of educational material a college student experiences, the amount and type of exposure to people from differing cultural backgrounds, exposure to students of equal status, and the perception about the university's support for increased cultural openness. Finally, the question of whether culture and racial heritage or the gender of a person influences willingness to change early perceptions of racial and gender differences was assessed.

Gordon Allport (1954) developed the idea that, given the right conditions, people can change their prejudicial attitudes. While there are 12 conditions that Allport outlines as necessary for change in racial attitude; four stand out as the most important factors necessary for promoting increased cultural openness and reduced prejudice (Brown, 1996; Pettigrew & Troop, 2006). The belief in institutional support for tolerant attitudes, equal status of persons involved, the existence of cooperation between differing cultures, and adequate time of exposure are the four most prominent factors needed to effect change in prejudicial thinking (Brown, 1996; Pettigrew & Troop, 2006). This study

incorporated these four factors into a three hour workshop, which was added to a standard first year seminar course, and compared the possible effects it has on cultural openness with first year college students who took a standard first year seminar course without the added workshop .

Background and Rationale

As of the year 2050 nearly one half of the population in the United States is estimated to be comprised of persons of color (Mercer & Cunningham, 2003). This number will only increase with time and will logically result in increased minority student enrollment in institutions of higher education (McClellan, Cogdal, Lease, and Londono & McConnell, 1996). This increase requires that university administrators, faculty and staff must help to create an environment where people of differing cultural traditions and backgrounds can live, interact, and study comfortably (McClellan, et. al., 1996, Blincoe & Harris, 2009). Without effective education towards life in a diverse society, college campuses may continue to see issues of racial conflict that detract from their ability to educate students effectively. Multiculturalism and tension regarding diversity have been cited as the most unresolved issue on college campuses today (Whitt, Edison, Pascarella, Terenzini, & Nora, 2001). Much of the recent research on campus climate and micro-aggression indicate that Students of color, women and homosexuals experience both overt and subtle forms of bias which can negatively impact their educational experience (Boysen, Vogel, Cope, & Hubbard, 2009). With the future increase of minority student presence on college campuses the potential for increased unrest and bias is likely.

It has been argued that nowhere in United States society has the issue of racial diversity been more apparent than in the realm of higher education (Fischer, 2011). Minority issues are a substantial source of unrest on college campuses (Levine & Cureton, 1998) and many campuses continue to experience increased levels of racial unrest especially in the form of microaggressions (Engberg, 2004; Boysen, et al., 2009). Student differences continue to be a source of focus with eight percent of Students of European Descent respondents, 67% of Black respondents, 28% of Hispanic respondents, and 53% of Asian respondents agreeing that racial discrimination will severely affect their chances of obtaining a job after college (Levine & Cureton, 1998). In a pilot study of tolerance on college campuses the Campus Tolerance Foundation (2008) found that between 43 and 64% of students on three major college campuses report they have experienced or witnessed bias or harassment in the forms of graffiti, verbal insult, physical threat, or physical assault because of their group membership. As minority student enrollment increases, the need to help students understand and address issues of prejudice, stereotypes, racial and gender equality, discrimination and increase the equality of college experiences for all students still exists. As students from differing backgrounds begin to live in closer proximity, through exposure to higher education, they will require the proper setting, information, potential for friendship, and opportunity to cooperate in noncompetitive tasks to reduce the potential negative effects of stereotypes, prejudice and racism.

Weingartner (1992) indicates that one of the goals of higher education is to help students develop a sense of global awareness. The Association of American Colleges (as cited by Braskamp & Engberg, 2011) has also highlighted the importance of global

learning especially for the undergraduate student. The world has literally become a smaller market place where any country can compete or join together with other countries to develop and sell goods to one another. This factor creates impetus for institutions of higher education to help students recognize the need to learn about various cultures and to gain a sense of increased cultural openness for those who originate from differing cultures. Boyer (1992) calls for higher education to obtain a new level of cultural/ethnic sophistication to meet the needs of the current diverse work force. Paceraella, Edison, Nora, Hagedorn, and Terenzini (1996) find it reasonable to be concerned with the methods that institutes of higher education "engender in students greater openness to racial, cultural, and value diversity" (p.175). Higher education has been called upon to help students gain values consistent with cultural openness and openness as a reflection of society's need for greater cultural openness and acceptance (Taylor, 1998). The need for institutions of higher education to address the issue of cultural diversity, cultural openness and racial attitudes in students abounds, but the question of how to do so in an effective and meaningful way remains (Herzog, 2012).

Most attempts to address the issue of teaching about diversity on college and university campuses have seen mixed results (Bowman, 2009). Offering courses in women's studies, African-American Literature, or Hispanic studies do not provide a comprehensive approach to helping students develop knowledge or awareness about values and belief systems of other cultures. Taking one course does not assure students will address the full measure of what is required under international and multicultural education due to the quantity of varied concerns which need to be addressed (Weingartner, 1992). Mitchell Chang (2002) states that the strategy of offering courses

that do not focus explicitly on race or ethnicity makes a large assumption that students' critical thinking ability will allow them to transfer understanding from the more general to specific issues of cultural pluralism. Therefore, use of the academic curriculum and specific courses should not be the only avenue by which universities and colleges attempt to address the issue of racial attitude development. Bowman (2010) states that it takes several types of diversity experiences such as interpersonal interactions, diversity coursework and diversity workshops to increase the cognitive development of college students. Institutions need to use an array of efforts on a variety of fronts including social and academic in order to expose students to cultural diversity issues and enhance curriculum efforts already in place.

Student development divisions in higher education have addressed the issue of cultural awareness through a variety of means. The use of extra-curricular activities or events to facilitate development of cultural awareness may include sponsoring speakers, seminars, and various forms of entertainment. These approaches, while aimed at promoting cultural awareness, often become barriers to developing awareness because students may think of them as activities which appeal exclusively to the cultural group they represent and not as an activity they would enjoy themselves (McClellan, et. al., 1996). Speakers or entertainers who appeal to African-American students will not be highly attended by Caucasian students, thus negating prime opportunities for Caucasian students to learn or experience differing cultural perspectives. Vasquez (1993) calls for a blend of efforts to create a balance between expenditures on speakers and visiting scholars and efforts to increase curricular reform, movement toward developing a

culturally diverse faculty and staff, and more academic programming aimed specifically at multicultural issues.

Many college campuses have offered a varied number of programs or courses to address multicultural awareness issues (Humphreys, 1998). Universities now structure programs that address multiculturalism through formal instruction and the use of diversity courses with emphasis on ethnic studies, women's studies and social justice (Bowman, 2010). Higher education has begun to look at issues of race, culture, class, and gender as important aspects of developing a whole college experience for students. Providing structured courses or multicultural components within a variety of courses is more popular with academe and several studies have found that student satisfaction with college increases with exposure to such information (Humphreys, 1998). In a report by the American Association of Colleges and Universities indicate (as cited by Klak & Martin, 2003) that universities have put effort into creating more inclusive and tolerant campuses but these efforts are not reaching their potential.

McClellan et al. (1996) indicate that while college and universities promote cultural awareness and acceptance through workshops, retreats, conferences, focus groups and orientation activities, they do little to explore the perceptions and efficacy of their programs. Providing seminars, speakers, and other avenues toward encouraging awareness and education around cultural issues needs to be followed up with appropriate assessment to determine the efficacy of such work in providing positive changes in student's knowledge, attitudes or behaviors (Muthuswamy, Levine & Gazel, 2006). Evaluating a program based on the number of students who attended, or how much money was invested does little to promote true understanding of what works to increase

understanding of diversity issues. Kulik and Roberson (2008) call for research efforts to determine what actually works in diversity education. Much of the effort to increase such understanding could begin in the first year of a student's college life through such targeted means as workshops, or first year seminar classes.

The first year of college is marked by many changes for students embarking on their university experience. The university experience provides educational opportunities beyond the classroom and addresses all areas of a person's life. Pascarella and Terezini's (1991) in-depth and comprehensive work on how college affects students shows that learning and attitude change occurs in the educational, social, personal, and career development of the college student during the undergraduate experience. The first two years, however, demand the most change of life and life-style with the first year being by far the most significant (Loeb & Magee, 1992). This is often the time of life when a person's belief and value system is challenged by exposure to wide varieties of information and experiences differing from those previously encountered in a student's family life, educational experience or local community.

The first year experience is marked with many opportunities for growth and change. Students arriving at college for their first year are full of excitement, fear, anxiety, and wonder about the new worlds that lie before them. It is during this first year of college that many First year's early-defined values and beliefs are thoroughly challenged to the point of genuine reflection and possible change (Bowman & Brandenburger, 2012). Included among these challenges is their exposure to people, both students and faculty, from differing cultural and ethnic backgrounds. The level of exposure to other people who live or were raised in different cultural traditions a student

experiences may have an effect upon the amount of cultural openness toward people from different racial or ethnic heritages a college he or she might develop. Direct exposure, combined with structured and cooperative learning exercises, a sense of institutional support for cultural openness, and enough opportunity for acquaintance, may challenge prior beliefs about people from differing cultural background to the point of increasing some levels of cultural openness. The need to assess the effects these components have on cultural openness building is required if higher education is going to invest significant amounts of resources into helping to reduce prejudice and increase cultural openness (Blincoe & Harris, 2009).

Purpose of the Study and Related Research Questions

Developing evidence to help determine what influences the amount of change first year college students' experience in the area of cultural openness could help counselor educators, especially those teaching in student affairs programs, recognize developmental issues that need addressing on university campuses. The primary psychological, sociological purpose of this inquiry is to assess the effectiveness of a multicultural workshop, based on premises from Allport's Contact Hypothesis (Allport, 1954) is, potential for changing first year students' attitudes toward cultural openness. This endeavor starts as an effort to provide college counselors with effective outreach programming in which to impact cultural openness and cultural attitude change that can be measured.

Overview

Randomly sorted groups of female and male students both on-campus and off-campus, both Students of color and Students of European Descent, were pre and post

measured with an instrument that measures a cognitive, affective and gender equity construct. The instrument was administered after the students participated in a first year seminar class which either included a cultural diversity seminar, or did not include a cultural diversity seminar.

Research Questions

The following research questions are of interest for this study. After participating in either an augmented first year seminar course or a standard seminar course can post uniformity of change across all intersections (treatment, gender, race, and housing) of independent variables occur for either the cognitive or affective components of the QDI? Specifically for any of the independent variables (Student of European descent, Student of Color, Male, Female, living on campus, living off campus, standard treatment or augmented treatment) can the means all increase or decrease across all intersections of the other independent variables? For example is it possible for all of the students who live on campus mean scores to increase or all decrease, regardless if they are male or female, Student of European Descent, or Student of Color, or whether they received the augmented or standard first year course? 2) Do pre and post mean score differences for any intersection of independent variable show a significant magnitude of change (increase or decrease) when measured either cognitively or affectively? Specifically, do any of the independent variables show a significant increase or decrease in mean scores post-test on the cognitive or affective measure of the QDI? 3) Within any specific intersection of independent variable is there a high, medium, low or low low correlation between the within intersections of independent variables pre-test post test score vectors under the cognitive or affective QDI measure? Specifically, the last two questions

address the degree of change, the direction of change and the homogeneity of change within each of the intersections of independent variables. The degree of change can be measured by the size of the difference between pre and post means, the direction of change can be measured by the sign of the difference between pre and post means, and the coherence of change can be measured by the correlation between pre-test, post-test score vectors (a directed line segment whose length represents the magnitude of change and whose orientation in space represents the direction).

Delimitations of the Study

Limitations: Instructors for the first year seminar courses were different and, while the course format was the same, instructors use a variety of different teaching methods and emphasize different aspects of the course based on personal preference. Students may respond to one instructor's style more openly which could have an impact on the student's willingness to change ideas or beliefs.

Due to the nature of scheduling problems, it was necessary to use two different instructors for the multifaceted multicultural training workshop provided in the augmented first year courses, both were female, one was Caucasian while the other was African American. This may have had some influence on how the course was taught and the study could not effectively control for teaching style differences or issues based on cultural background or heritage.

Experimenter bias was controlled for by using two qualified instructors for the workshop. Both instructors have had prior experience dealing with diversity issues and have taught first year level courses in the past.

Statistical issues: Maturation: due to the passage of time first year students begin to mature and this could not be controlled.

Definitions of Terms:

Affective construct or measure: The construct measured by the QDI which evaluates at how people “feel” about race and diversity issues.

Augmented Treatment: The treatment in this study which added the Multifaceted Multicultural Seminar, based on the four primary components of Allport’s contact hypothesis, to the standard first year seminar class.

Cognitive construct or measure: The construct measured by the QDI which evaluates at how people “think” about race and diversity issues.

Cultural Openness: The willingness of a person to be accepting of persons or ideas originating from races or cultures other than their own.

Contact Hypothesis: the theory that states that under the appropriate conditions interpersonal contact is the most effective way to reduce prejudice between groups of people who differ in cultural background (Allport, 1954)

Micro-aggression: subtle insults in the form of verbal, nonverbal and visual cues directed toward people of color in an automatic or unconscious way (Solorzano, Ceja, & Yosso, 2000).

On Campus: Students who live in any residence located on the Campus of Francis Marion University and for which they pay housing fees to the university.

Off-Campus: Students who live in any residence not associated with Francis Marion University and for which they pay no fees to the university for housing.

Standard Treatment: Standard first year seminar classes given by first year seminar instructors without the added Multifaceted Multicultural Seminar included.

Students of European Descent: Students who identify themselves as White, Caucasian and having the characteristics of a race originating from Europe, North Africa, and southwest Asia with the physical characteristics of light skin pigmentation (Merriam-Webster Online, 2013).

Students of Color: Any students who self-identify as non-European descent or whose ancestors originate from Africa, Asia, North or South America prior to European arrival and are of non-European descent and whose skin pigmentation is different from the Caucasian race (The Free Dictionary, 2013)

CHAPTER 2

Review of the Literature

The impact of college on college student's racial cultural openness has been studied in a variety of ways. Studies focus on how the universities provide diversity programming, how universities incorporate multicultural education into the curriculum or how well represented are faculty of color within the university. Many of the studies do not however look at the impact of various types of programming for increasing racial awareness on the actual ability to change the students' cultural openness levels, nor do the studies compare themselves with a standard curriculum. Stephan and Stephan (2001) only found seven studies that looked at the impact of diversity trainings on students and only three of these were judged to have been successful. Carol Kulk and Loriann Roberson (2008) identified only 31 studies from 1970 to 2008 that evaluated diversity education effects on attitudes and 14 studies that addressed increasing student knowledge about diversity. The results of these studies indicate that diversity education results are mixed in their ability to effect attitudes and good in their ability to increase knowledge about diversity issues (Kulk & Roberson, 2008). The number of studies identified in the pursuit of assessing diversity training's ability to change undergraduate college students' racial attitude and cognitive beliefs leaves room for more research in the effectiveness of training courses, seminars or interventions with a need to look at the specific effects of specific interventions (Kulk & Roberson, 2008).

The issues of how people develop learn to cope with, or change racial attitudes have only been researched in the recent past. Understanding how people develop their racial attitudes is important to learning how to create attitude change. As people grow and develop opportunities to change beliefs and attitudes present themselves through a variety of experiences. It is through experience that belief systems develop and grow. One such influential experience can be attending college.

A person's life can be highly influenced by their participation in college. College provides many people with a great opportunity to learn much about life and interpersonal relationships (Beard, Elmore, & Lange, 1982). College has a unique role in affecting students developmental growth as college students are in the developmental stage where people develop their social and personal identities (Spanierman, Poteat, Oh, Hund, McClair, Beer and Clarke, 2008; Bowman, 2010). The college environment is often the first meaningful opportunity for students to interact with culturally diverse peers (Spanierman, et. al. 2008; Bowman, 2010; Sanez, 2010,). As college has very influential effects on students beyond just the academic it is a good environment to provide opportunities to help students begin to develop more open attitudes and beliefs about cultural diversity.

This review of the literature focuses on defining: what racial attitudes are, how they are developed, what processes occur to create change or insight into racial attitude development, the different racial attitudes of students of European descent and Students of color, how gender effects racial attitudes, how racial attitudes affect college students, how first year college students are affected by their racial attitudes, and how does choice of on or off-campus living affect students' racial attitudes.

Racial Attitudes

Attitudes or beliefs about racial differences are primarily developed similarly to attitudes or beliefs about any other subject. Rokeach (1971 p. 453) states that "... an attitude represents an organization of interrelated beliefs that are all focused on a specific object or situation..." Racial attitudes are just such a specific object or situation. Attitudes consist of cognitive, affective and behavioral components (Weiten, 2001). Attitudes are more than just a thought or belief because they combine our thoughts, feelings and deeds and are often expressed through each of these realms of human behavior. A person's attitudes towards people of differing race or gender are just such a combination of thoughts, feelings, and behaviors. These attitudes are centered in an often strongly held or ingrained belief system. Racial attitudes can be expressed through feelings of disdain, actions of discriminatory behavior, and stereotypical thoughts or beliefs about persons from differing cultural or ethnic backgrounds (Hillis, 1996). How a person develops his or her racial attitudes early in life can have a long-term effect on their future interaction with people of differing cultural heritages or backgrounds.

Racial Attitudes of College Students

Simone Taylor (1998) says that college students bring a "composite self, composed of levels of moral development, aptitudes and sets of experiences (e.g. family education social network, religiosity) that contribute to their initial level of cultural openness". The National Study of Student Learning found that pre-college openness was a strong predictor of first year college students' end of year openness to cultural openness (Whitt, Edison, Pascarella, Terenzini, & Nora, 2001). Precollege exposure to diversity related activities have been found to have an impact on college students' willingness to

engage in college diversity activities (Saenz, 2010). This initial level of cultural openness will affect the way and amount a college student can change or grow in openness to diversity issues. Addressing multicultural issues early in a college student's experience could help to generate more awareness and openness sooner in their lives.

Saenz (2010) found that prior to college 80% of Students of European Descent students and 70% of African American students attend schools predominantly of their own race. This re-segregation of K through 12 grades in the U. S. indicates that college will be the first real meaningful opportunity for many students to interact with a more racially diverse student population (Saenz, 2010). In studies on the racial attitudes of college students the literature indicates that both Students of European Descent and Students of color continue to perceive a need to enhance the multicultural climate on-campus (Whitt, Edison, Pascarella, Terenzini & Nora, 2001; Fisher & Hartmann, 1995; Brigham, 1993).

College students recognize the need for improved multicultural climates due to existing attitudes that exist on university campuses. In a study on cultural attitudes and climate at The University of Maryland, Sedlack and Bouis (1995), indicate that Students of color perceive issues of academic performance, expectations about representing their race in class discussions, and a lack of examples relevant to Students of color as contributory to the need for continued and increased programs to address multicultural issues. In the same study students of European descent indicated discomfort discussing their beliefs or thoughts about ethnic/racial issues and felt that the university was providing enough or too much effort on the issue of multicultural issues (Sedlack & Bouis, 1995). Many studies also indicate that Students of color experience college

campus climates not as welcoming or accepting as Students of European Descent students (Boysen, Bagel, Cope & Hubbard, 2009) and The difference of perspective of how much multicultural issues are addressed is in itself and indication that college students may benefit from early exposure and more in-depth discussion of these issue early in their college experience.

Racial attitudes of Students of European Descent

Brigham (1993) indicates that racial attitudes of Students of European descent have been broken down into a variety of categories. These categories include dominative racism or old fashioned racism, symbolic or modern racism and aversive racism. Dominative or overt racism is the type of attitude that is associated with people who express their racist beliefs in the open. Dominative racial attitudes are those associated with open criticism, hostility and derogatory beliefs toward minorities (Baldwin, Day & Hecht, 2000). Modern racism is characterized by a deep moral feeling that minorities violate traditional values of individualism and self-reliance. Modern racism is evident in people who vote against a black political candidates, oppose affirmative action or express concerns about welfare abuse or increase in urban crime (McConahay & Hough, 1976; Sommers & Norton, 2006). Students of European descent who express their racial attitudes in more subtle expressions including discomfort, uneasiness, fear, or avoidance of minorities, or in terms of micro-aggressions are included in the aversive or subtle racism category (Brigham, 1993; Sue, Capodilupo, Nadal, & Torino, 2008). Aversive racists indicate that they believe in equality and deny being racist, however they express racist behavior in subtle actions. It cannot to be assumed that all Students of European descent fall into one or the other kind of racism as students of European descent are not

necessarily totally racist, however it is argued that Students of European Descent Americans do see the society as “open, fair, and color-blind” (McClelland & Linnander, 2006). The similarities within each of the different types of racism have been called “contemporary racism” (McClelland & Linnander, 2006) which recognizes that at the heart of each type of racism is the idea that Students of European Descent Americans deny being overtly racist, support efforts to reduce racism, and are blind to the subtleties of how racisms’ effects harm both People of Color and People of European descent.

Students of European descent express their racial cultural openness in a variety of ways. Studies indicate that Students of European descent hold feelings of animosity underneath a facade of anti-racist attitudes (Biasco, Goodwin and Vitale, 2001). In a reverse of the predominate beliefs self-segregation has been found a greater problem for students of European descent than Students of color (Matlock, 1998; Smith et. al. 1998) and Students of European Descent students are less likely to be prepared to engage with diversity in college settings (Saenz, 2010). Students of European descent tend to prefer to sit in like groups and to room with other students of European descent. Students of European descent indicate on written surveys that they approve of inter-racial marriages but when interviewed personally they tended to deny such feelings (Bonilla-Silva, 1998). These types of attitudes indicate that feelings about racial issues in students of European descent tend not to be either totally positive or totally negative. Christopher Federico, (2006) suggests that Students of European Descents’ racial perceptions may often deviate from either positive or negative attitudes towards having both positive and negative racial attitudes at the same time.

Reed and Radhakrishanan (2003) found that Students of European descent perceive campus climates as non-racist or non-discriminatory. Students of European descent in a study of attitudes toward racial discrimination did not perceive as much discrimination as did Students of color ((Biasco, Goodwin and Vitale, 2001, Nora & Cabrera, 1996). These attitudes may be indicative of Students of European descent overall lack of experience of racism or prejudice directed at them. Students of European descent may fail to recognize the subtle forms of racism that Students of color experience and therefore fail to perceive racism as a major problem on-campus. The failure to perceive racism as a major problem on-campus by students of European descent is a clear indicator that the racial attitudes of Students of European Descents and Students of color differ.

Students of European Descent students' lack of understanding about the nuances of racism and its effects, not only on those who are discriminated against but also upon Students of European Descent students themselves (Todd, Spanierman & Poteat, 2011), requires more than just increased contact with Students of color in order to effect racial attitudes significantly (Ford, 2012). Rather than only relying on the potential for increased contact with Students of color, within the increasingly diverse college campus, it is imperative that Universities and Colleges provide creative ways of providing opportunities for Students of European Descents to explore the issues of race (Ford, 2012). Because of Students of European Descent students lack of understanding of the effects of racism, the first year of college is thought to be a crucial time in helping to begin the process of developing awareness and beginning to change previously held racial attitudes (Todd, Spanierman, & Poteat, 2011).

Racial Attitudes of College Students of color

Helen Neville and Roderick Lilly (2000) found that “few studies have attempted to examine African Americans’ composite racial identity schemata or the underlying dimensions of their racial identity patterns” (p. 195). I found that most studies about racial attitudes of Students of color tend to focus on how they perceive their campus climates or how much they feel discriminated against. Maramba and Velasquez (2012) indicate that “we know relatively little about how college Students of color develop their ethnic identity and how that identity impacts their perceptions and experiences in higher education” (p. 297). Much of the literature about college Students of color attempts to assess the impact of racial discrimination on their ability to perform in college or on their self-perceptions rather than how they think or feel about students who differ from them in culture or race.

In a study at five undergraduate colleges in California, Students of color indicate that they experience more discrimination than Students of European Descents and students who experience racism report lower levels of academic achievement and social adjustment (LaSure, 1993). Reid and Radhakrishnan (2003) found through a review of the literature that Students of color consistently find that the general campus climate toward racial issues more negative than did students of European descent. Students of color complain that they do not feel they are taken seriously as students, that they did not get adequate advising or mentoring and reported being less self-confident than Students of European descent (Reid & Radhakrishnan, 2003). In a study on attitudes toward racial discrimination Biasco, Goodwin and Vitale (2001) found different perceptions among the various races exist as to whether or not racial discrimination exists. Students of color

perceived higher levels of racial discrimination than did Students of European descent (Biasco, Goodwin, & Vitale, 2001). Most of the research on students' of color racial attitudes do not focus on their own perceptions toward issues of race but rather on whether or not they feel discriminated against in the higher education setting. More focused research with Students of color on their personal perceptions of cultural openness and on racial attitudes toward culturally different students is needed.

Racial Attitudes of Men and Women

Very few studies have looked at gender differences on racial attitudes (Hughes & Tuch, 2003). Most of the studies on Students of European Descent racial attitude include gender as a control but do not look at how gender itself affects racial attitudes. The author found no studies that focused on how the Students of color gender effects their racial attitudes. Gender differences can impact people's racial attitudes in significant ways.

Men and women differ in their racial attitudes. Men and women are socialized differently from birth as they are exposed to gender specific beliefs and behaviors which help to create their sense of self and how to interact in the world around them (McCollum & Kahn, 2006). Men have been found to pursue different goals in life when compared to women. Men tend to pursue goals of superiority or social status when compared to women in a study on social goals (McCollum & Kahn, 2006). Women tend to pursue social responsibility and intimacy/relationship goals more often than men (McCollum & Kahn, 2006). Women also have been found to enter college with higher levels of motivation for social change and with greater levels of readiness to engage in social action (Malaney & Berger, 2005). The pursuit of these differing social goals can have an impact upon how men and women interact in their world and how they view issues such

as cultural differences. Having a more pro-social orientation may lead to more inclined support of interracial interaction and policies (Hughes & Tuch, 2003).

College can have an effect on male and female cultural openness levels. It had been found that female students gain from two to three times the cultural openness compared to males in their first two years of college (Bowman, 2010; Taylor 1998). This gain has been linked to the females' pre-college socialization experiences, the effects of college experiences and the impact of the higher moral development of females (Taylor, 1998). Males on the other hand were found to have little to no change in cultural openness levels in the first two years of college (Taylor, 1998). Katherine McClelland and Erin Linnander, 2006, also found that women tend to have lower levels of contemporary racism than men. These differences may be related to gender issues including females likeliness to be more relational oriented than males, females socialization toward more pro-social goals, females tendency toward nurturance, and males tendency toward individual success and competition.

Campus Residence effect on Racial Attitude

The effects of living on or off-campus on racial attitudes have not been widely studied. Research has looked at the effects of creating special housing for Students of color and their academic success and the effects of living learning communities (Pike 2002), but little has been done to study the effects of traditional on or off-campus housing on racial attitudes. The studies that have been conducted found that living on-campus show positive influence on college student's racial attitudes, however the strengths of this influence was variable (Pike, 2002). Studies have found that Students of European Descent tended to increase their number of friends of color if they roomed with a student

of color even if they had not previously known the minority roommate , however the same is not true if they room with other Students of European Descent (Martin, Trego, & Nakayama, 2010; Mark & Harris, 2012).

Korgen, Mahon and Wang (2003), looking at the effects of living on or off-campus on students perceptions of racial tension, inter-racial friendships and dating persons of the opposite race, found a possible tipping effect among on-campus residents on a diverse college due to the higher number of minority, particularly African American, students living on-campus. That is to say that the more African American students who live on-campus the more negative students of European descent viewed campus race relations and this decreased Students of European Descent student's likelihood of having friends of or dating another race (Korgen et al., 2003). This tipping effect could be explained by the fact that having more Students of color on-campus increases the availability for Students of color to interact more closely within their race thus reducing the need for friendships or dating relationships outside of their own group. As Students of color self-segregate, their openness to friendships outside of their own race may diminish and therefore students of European descent might view them as more resistant or less open to cross race interaction resulting in more negative perceptions of race relations. This self-segregation may be more noticeable because of the larger numbers being seen in the cafeteria, at sporting events, and in participation in African American Fraternities and Sororities or Clubs and Organizations. Another reason for this tipping effect may be that students of European descent are less likely to challenge their preconceived or early beliefs about other races due to their own feelings of intimidation based only on the greater number of minorities present on campus. These undefined fears

could prevent a willingness to reach out to a member of a large group of people who are different while it is easier to reach out to a member of a different race when the overall numbers are lower and therefore not as intimidating.

The research on the effects of living off-campus on racial attitudes appears mixed. Chickering (1975), as found in Korgen, et al. (2003), that Students of European Descent commuter students attending a more diversely represented university were more likely to view campus race relations positively and to date or develop friendships interracially than on-campus students. Living off-campus may limit the exposure of racial friction as off-campus students tend to attend class and visit the library but may not rely on on-campus activities for their social interaction. Off-campus living may also reduce the social network available to these students therefore encouraging more openness to social interaction with students of a different race than their own. Off campus students are not as exposed to the number of Students of color as on campus students and therefore may not get as much exposure to the social activities of Students of color.

The effect of living on-campus on racial attitudes appears to also have mixed results. Pascarella, Edison, Nora, Hagedorn and Terenzini (1996) found that first year students of European descent who live on-campus were 20 times more likely to become more open in racial attitudes than Students of color or commuting students. Meader (1998) also found that living on-campus has a positive effect on students of European descents' support of diversity issues.

Students of European Descent students who live on campus at colleges that have a higher representation of Students of color attending tend to experience more negative feelings toward diversity issues (Korgen, Mahon, & Wang, 2003). Korgen et al. indicate

that a possible tipping effect may occur when a higher proportion of Students of color, in particular African American students, live on campus. This tipping effect indicates that Students of European Descent on campus students are more likely to view race relations negatively than on college campuses where the percent of Students of color living on campus is lower.

There are few studies that look at the impact of racial attitude and on-campus living with Students of color (Harwood, Hunt, Mendenhall & Lewis, 2012). The studies that do exist find that Students of color perceive resident hall climates as being negative and as having experiences of stereotyping and micro-aggressions, but living on campus improved personal and social development compared to Students of color living off campus. (Harwood, Hunt, Mendenhall, & Lewis, 2012).

Racial Attitudes of First Year College Students

Chan and Treacy (1996) state, that first year college students are often wary of new perspectives such as the volatile issues of race and class. The concern arises from the combining of cognitive and affective separation with those of the new physical separation from their families to which they are just beginning to adjust (Chan & Treacy, 1996). Racial attitudes of new college students have been developed and formed from their childhood. Both early education and indoctrination from family, peers, and the educational system from which they enter college influence these attitudes. During the course of college life students often move from a position of “differences do not matter” to acknowledgment that “inequalities do exist based on differences” (Chan & Treacy, 1996). In a study on attitude change and self-perceptions Leob and Magee (1992) found that students exhibited less prejudicial views within the first two years of college with

significant decreases reported in the initial year. In a study on first year students openness to diversity and challenge, Pascerella, Edison, Nora, Hagedorn & Terenzini, (1996) found that students who live on-campus, who spend more time studying, and who are highly active with student peers tend to have higher levels of openness to diversity and challenge. First year students who perceived their institution to have a non-discriminatory racial environment, who attended a racial or cultural awareness workshop, were involved with diverse student acquaintances and who had precollege openness to diversity and challenge were associated with greater end of first year openness to diversity (Whitt, Edison, Pascerella, et. al. 2001). First year students present as being more ready to investigate or explore their previous racial attitudes given the proper atmosphere for doing so.

First year college students are often exposed to a variety of different types of kinds of people in their first year of school. Many first year college students experience their first real exposure to students from another race as a function of attending college (Shang, 2008). This exposure not only occurs in the classroom but also in the residence halls and in various college activities or events. First year students who live on-campus have a greater amount of exposure to persons of different cultural backgrounds than those who live at home. Pascerella et. al. (1996) found evidence to support that one of the highly influential factors for students developing openness to diversity or challenge is whether or not they live on-campus or commute. Students living on-campus were found to be more open to diversity issues in their first years of study (Whitt, Edison, Pascerella, et.al, 2001). Commuting students do not participate in on-campus social activities as much as students living on-campus thereby reducing the opportunity for longer term,

more meaningful exposure to students who are culturally different than themselves. Creating a variety of opportunities for both on-campus and commuting students to interact in longer, more meaningful social or educational events could satisfy student's desires for higher levels of intergroup interaction.

The literature suggests that students seek and desire greater levels of intergroup contact than they actually experience during their college life. Cole, (1991) indicates that college students seek positive experiences with people whose racial backgrounds are different from their own in order to develop the necessary skills and knowledge to contribute to the multicultural world. When such interaction occurs students indicate greater levels of understanding, decreases in prejudicial attitudes, greater institutional satisfaction, more involvement and positive academic success (Humphreys, 1998; Smith, Gerbrick, Figueroa, Watkins, Levitan, Moore, Merchant, Beliak, & Figueroa, 1998). The more students interact with peers from differing racial backgrounds and the more they engage in conversations around value-laden issues the greater openness is increased (Pascarella et. al., 1996). Amy Lee, Rhiannon Williams and Rusudan Kilaberia (2012), refer to several studies that indicate that engaging with diverse students has many positive results including increases in cognitive, academic, social and prejudice reducing skills. Spending time with peers of differing cultural backgrounds expose college students to the kind of new and different ideas that challenge people to question existing racial beliefs or attitudes thereby facilitating possible changes in these established perspectives.

Harvey, (1998) recognizes that as students enter college they bring with them the racist attitudes that were instilled from their homes and neighborhoods, however he also understands that as these students move through "...the pivotal formative phase known as

college life...” they bring with them the psychological openness to shed these views given the proper opportunities to learn and grow. College is a place where students can challenge their existing beliefs resulting in either a change or further entrenchment of those beliefs. Factual information alone does little to create attitude and behavior change (Pardeck, Fuge, Hess, McCoy, Tinney, 1997), therefore students must be afforded the opportunities to analyze, discuss and experience new information first hand. The ultimate determination of whether or not a student makes changes in a belief system relies highly upon the discussion and analysis that occurs as part of the college experience (Harvey, 1998). The first year of college is a good place to start such discussions and analysis.

The time to help college students explore the effects that early attitudes and beliefs about racial, gender, and socioeconomic differences is in their First year. It is in this first year of college that students begin to test their independence, build new academic and social structures, try on new identities, and practice new behaviors (Pascarella & Terenzini, 1991). It is during this first year, or even first semester of college, that students could become more ready to change previously held attitudes and beliefs about family, peers, and life in general if given the proper educational, environmental and social opportunities. These opportunities can be made available in the classroom, through extracurricular activities, residence life experiences, and through Student Development activities.

First year Seminar classes provide a unique opportunity to help students begin thinking about the effects working and living with persons of differing backgrounds can have upon them in the future. First year seminar is a class that has the flexibility to address various issues that will affect student’s ability to succeed in college and in the

world in general by providing a thorough socialization function that establishes the behavioral norms expected of students attending college (Pascarella & Terenzini, 1991). First year Seminar also provides the four most influential conditions for changing racial attitudes in that the institution and social environment support contact between different race and gender for the promotion of positive attitudes; the contact between students of each first year seminar class lasts for a minimum of fifteen weeks; First year will have equal status as they are at their starting point in their college career with the same minimum requirements having been met to attend; and opportunities for cooperative behavior can exist throughout the course curriculum. The four components of Gordon Allport are necessary to help create true change in the racial attitudes of both students of European descent and Students of color.

Changing Racial Attitudes

Allport's Contact Hypothesis

Gordon Allport (1954) developed the theory of contact hypothesis which states that prejudice is reduced in direct relationship to the amount and type of contact that occurs between differing groups or cultures. The type of contact that mediates prejudice is the most influential aspect for initiating attitude and behavior change. Gaertner and Dovidio (1986) list the features that Allport (1954) postulates as necessary to increase intergroup cultural openness as:

“...cooperative rather than competitive interactions; cooperative interactions involving similar levels of competence between groups; cooperative tasks with outcomes that are positive; interactions among members who do not possess qualities stereotypically associated with their group membership; situations that provide strong normative and institutional support for the contact; similarity of beliefs and values between the groups; opportunities for intimate, self-revealing, personal contact; that has the potential to extend beyond the immediate situation; contact that is voluntary and extends over a lengthy

period; contact that occurs in a variety of contexts with a variety of in-group and out-group members; and contact involving equal status both within and outside the initial contact situation. (pp. 31-319)".

While Allport endorsed eleven different postulates for the creation of racial attitude change others who have studied Allport's contact hypothesis have identified the four most necessary postulates.

Brown (1996), points to four of these conditions as the most important for successful contact that will influence change in attitude, belief, and behavior. Social and institutional support of the measures employed to promote greater contact and interaction must exist to help create a social climate ripe for tolerant norms to emerge. Pettigrew and Tropp (2006), state that institutional support is a very significant condition toward stereotype and prejudice reduction. Acquaintance potential is the second condition Brown (1996) states are necessary for successful contact to occur. The contact between groups must be long enough, often enough and in close enough proximity to affect attitudinal change about different groups (Brown, 1996). The third most important factor, according to Brown (1996) is that it should take place between individuals who are viewed as having equal status. Equal status removes the ease of which stereotypes that promote the ideas that persons from differing cultures are inferior in their ability to perform various tasks. Finally, Brown (1996) emphasizes the importance of cooperation. People who have to rely upon one another to obtain a mutually beneficial goal have strong reasons to develop closer relationships with one another. These four conditions, if present, are powerful enough to improve openness toward more cultural openness and can reduce prejudice (Fischer, 2011).

Allport's early studies and writings on the nature of prejudice continue to influence current theory and perspectives on reducing prejudice and increasing cultural openness between race, gender, and culture. Wittig and Grant-Thompson (1998) relate that the Contact Hypothesis is one of the most researched principals for reducing prejudice. The Contact Hypothesis emphasizes the importance of individual prejudicial attitude change in relationship to social situations while identifying conditions necessary for successful intergroup contact towards the reduction of prejudice and increasing cultural openness (Wittig & Grant-Thompson, 1998). The utility of the contact hypothesis has been well established in the literature.

Various studies have provided empirical support for use of Allport's key conditions for change in prejudice. In a study about the utility of the contact hypothesis Wittig and Grant Thompson (1998) found that teachers' theories of attitude change are aligned with Allport's contact hypothesis. In a study on school interracial climate, based on Allport's four criteria of the Contact Hypothesis and coping with interracial stress, children's self-esteem and self-reported academic performance was positively affected (Marcus-Newhall & Heindl, 1998). In another study using the Jigsaw method, a classroom teaching method based on Allport's four key conditions, Walker and Crogan (1998) found that increase in student academic performance, increase of student liking of peers (both in-group and out-group), and decrease in stereotypes of out-groups occurred. Gaertner, Dovidio & Bachman (1996) completed a laboratory experiment, two survey studies and a field experiment to validate the ability of the contact hypothesis to reduce bias primarily through the induction of a common in-group identity. These four studies support the utility of the Contact Hypothesis as

the framework for reducing intergroup bias (Gaertner, Dovidio & Bachman, 1996). In another study of Allport's contact hypothesis Wright, Aron, Arthur, McLaughlin-Volpe & Roop (1997) conducted two survey studies and two experimental studies on effects of the knowledge of an in-group member's friendship with an out-group member. Wright et. al. (1997) found that knowledge of cross-ethnic friendship had a positive effect on racial attitudes of other in-group members and initially validated the causal direction from knowledge of cross group friendship to positive intergroup attitudes. Pettigrew (1998) reviews of various research supports Allport's contact hypothesis in his review of intergroup contact theory. Studies range from school and housing studies; to studies of Chinese, Americans, Australians, Germans, South Africans, South East Asians; the mentally ill or disabled persons; victims of AIDS; and computer programmers (Pettigrew, 1998). Research methods include field studies, surveys, archival, and laboratory studies (Pettigrew, 1998). Pettigrew and Tropp (2006) completed a meta-analysis of 515 studies of the contact hypothesis and consistently found that intergroup contact reduces prejudice. Many of the effects of contact often generalize beyond participants immediate contact situation to other situations (Pettigrew & Tropp, 2006). Overall the majority of studies conducted on Allport's contact hypothesis supports its tenants and provides a strong source of empirical support.

Studying the effects of Allport's contact hypothesis in a college setting perfectly support the four key conditions of institutional support, acquaintance potential, equal status and cooperation. Fischer (2010), states that residential colleges and universities are characterized by Allport's four key conditions. Students share

equal status in that they share the common goal of attaining a college degree, engage in many activities that are similar to one another, are often given the chance to participate in cooperative activities, experience institutional support for intergroup interaction in classes and extra-curricular activities, and have many chances to interact with students of differing cultural and racial backgrounds

Previous studies on the effect of contact and racial attitude change in college students have found the importance that contact plays in reducing prejudicial attitudes. The more contact students have with group members from other ethnic backgrounds the greater the impact on reducing negative racial attitudes (McClelland & Linnander, 2000). In a study on the impact of contact with Asian students on Students of European Descent students, Dinh, Wientstein, Nemon and Rondeau (2008), found that Students of European Descent students who had more contact with Asian students reported more positive attitudes and more awareness of racial discrimination.

Relevance to Counselor Education

Studying the effects that the first year of college has on racial attitudes and awareness has much relevance to the field of counselor education. Counselor Educators have taken a lead role in addressing the issue of race, gender, age, and sexual preference in their field of study, professional realms of therapy and educational outreach in higher education. The field of counseling has identified specific skills needed to become culturally competent. Sue and Sue (1990) state that a culturally competent counselor must be able to: (1) have an awareness of personal assumptions, values, biases, limitations and world view; (2) understand the world view of the culturally different client; and (3) develop appropriate interventions strategies

and techniques for working with culturally different clients. The need to establish similar competencies is essential for helping college students enhance their growth of multicultural awareness and sensitivity (Howard-Hamilton, Richardson & Shuford, 1998).

College diversity issues often call for preventive-community or environmental oriented work (Archer & Cooper, 1998). The outcomes of this study may identify opportunities for counselor educators who are involved in higher education to develop programming, outreach, or other services to students for developing cultural awareness and cultural openness. Counselor educators often have positions in university counseling centers and have some responsibility to help promote for the care and equitable treatment of all students.

Archer & Cooper (1998) identify several programs run by college counseling centers to address campus diversity and multiculturalism. Programs range from: mini-conferences on awareness and prevention of sexual harassment; workshops on valuing ethnic diversity; Gay and Lesbian programs offering closed or private groups, weekly discussion groups and workshops on same sex attraction, and the emotional and spiritual aspects of the Gay/Lesbian life-style; advising, consultation, and recommendations to students and faculty concerning the academic, psychological, and emotional issues of students with disabilities; minority retention programming; and workshops for adult learners on a variety of topics including blood pressure screenings, tax preparation, discussions groups, and cultural festivals (Archer & Cooper, 1998). College counseling centers often work and support other professional

staff in the provision of programs aimed at increasing cultural openness and awareness of the impact of diversity issues.

Ponterotto and Pederson (1993) view the counselor's role as uniquely qualified to help prevent prejudice development. Archer & Cooper (1998) state that college counselors can use a model that adds the roles of "...change agent or consultant, adviser, advocate, facilitator of within culture group support systems, and facilitator of traditional healing methods, (p.95)" to their typical counseling responsibilities. Counselors typically provide individual, family and group therapy opportunities for college students. These opportunities may present the chance to address issues of prejudice and racism through the dynamic process of therapy. Understanding the developmental aspects and the necessary change agents for reducing or preventing prejudice is the essential component for counselors to help create behavior change. College counselors need to be aware of the many effects that racial issues on campus may have on students they treat (Ancis, Sedlacek & Mohr, 2000). Finally, Ponterotto and Pederson (1993) call for counselors to become activists by using the media, multicultural education programs, and lobbying efforts of various counseling associations for the support of civil and affirmative action rights of minorities and women.

Studying the effects of current trends in developing cultural awareness on college campus is needed to identify what actually works. Many colleges provide workshops, seminars, speakers and a variety of opportunities for students to gain exposure and understanding of the need for cultural awareness and openness yet do little to explore the effectiveness of these programs on the students' thoughts or feelings of openness

to people of other races. This study will help to establish how effective the adding of a specific cultural awareness workshop within the framework of a First year seminar class against the standard First year seminar class has on students' cognitive and affective openness to cultural openness.

CHAPTER 3

Method

Purpose

The majority of university and colleges now have a course or specific programming for first year students that deal with helping acclimate to college life (Messineo, 2012). Within these courses the issue of racial and gender cultural awareness is often addressed. Universities and colleges also offer various seminars, lectures, or even curriculum that focus on diversity issues in order to help students address issues of cultural openness and acceptance of differences. The question of whether or not attempts to impact college students' perceptions are effective has not been thoroughly explored.

Within the question of whether the various courses or seminars are effective in changing attitudes or perceptions lies the question of which approach is best suited to helping college students' increase their openness to diversity issues. This study examined the general question of effectiveness of how courses typically introduce the issue of increasing cultural openness and a particularly promising augmented course with a workshop that incorporates the four key components of institutional support, acquaintance potential, equal status and cooperation based on Allport's Contact Hypothesis (Brown, 1996; Fischer, 2010)

Both questions represent categories of change that are of special interest: uniform significant change measured across all intersections of independent variable levels and large significant change measured within all intersections of independent variable levels.

Independent Variables

Each category below is considered to be a full independent variable. None are moderating or mediating variables because each, by itself, could be responsible for per pound of structuring racial attitudes. The registrars' office determines which students meet the criteria for each of the independent variables by a set of rules or definitions that follow university policy. For the purposes of this study the university registrars' office definitions determine appropriate membership in the following independent variable classifications (Table 1).

a. Treatment

- (1) Standard First year seminar course
- (2) Augmented First year seminar course

b. Race

- (1) Students of European descent
- (2) Students of color (African American, Asian, Hispanic, Native American, Other)

c. Housing

- (1) On-campus
- (2) Off-campus

d. Gender

- (1) Male
- (2) Female

Dependent Variables

The study uses the Quick Discrimination Inventory to measure Dependent Variables. The Quick Discrimination Inventory assesses three distinct constructs. The first and second constructs focus on the issue of race while the third construct measures for the issue of gender equity. As this study addresses only issues of race, it will include only the first two components in its analysis. However, so that procedures of the validated instrument are not altered it was administered in the usual fashion and gender data was collected. The data on gender is included in Appendix B for any researcher who might find it of interest. The first two components, the racially related components, are each designed to assess a particular and distinct racial construct. The first construct measures cognitive perspectives of race and the second measures affective measures of race. These constructs can also be thought of, respectively, as “what one believes” and “what one feels” about racial issues (Ponterotto, Potre, & Johansen, 2002). The QDI is titled the Social Attitude Survey in an effort to control for participant expectancy bias (Table 1).

Analysis

At this stage of research the focus of study is on the fundamental changes within distinct social groups. This study assessed social groups that have a genuine social reality as opposed to groups that are contrived for the specific purpose of conducting research. For this reason use of the Students T test and Pearson Correlation is both effective and appropriate. At this stage of research both ANOVA and ANCOVA are inappropriate and premature in that, primarily, a clear foundation of within group changes must be firmly established before any more complex relationships can be considered. Therefore the

Table 3.1

Independent and Dependent Variable Tables

Independent Variables						
Gender Treatment	X	Location	X	Race	X	
Male Augmented		On Campus		Student of Color		
Female Standard		Off Campus		Student of European Descent		
2	X	2	X	2	X	2

=16 Cells

Dependent Variables		
Response Construct	X	Measure
Cognitive Affective Gender Equity *		Correlation Mean Change
3	X	2 = 6

Tables

* Gender equity not being a measure of interest for this study

primary focus of this study is specifically on Students of European Descent and Students of Color who are male or female and who live on or off-campus because these groups represent distinct assessable entities as opposed to the class of females or males summed across ethnicity and location. A secondary interest that occurs across the group scores is for all independent variables and the impact both treatments may have on any of them.

Questions and Hypotheses Across and Within

Do pre-post mean score differences, for any independent variable levels; treatment, race, housing or gender, show significant commonality of directional change (increase or decrease) when measured, either cognitively or affectively, across all intersections of other independent variable levels? More easily explained do all Students of European Descent and Students of color who live either on and off campus and who received either the standard or augmented first year courses show increase or decrease in mean scores from pre to post testing? It would be rare for all females or males; or for all Students of European Descent or Students of color; or for all on-campus or off-campus or; all students who participated in the augmented or standard treatment, post-test means to increase or decrease when compared to pre-test scores. Therefore;

Ho: Pre-post difference in the dependent variable score means of any independent variable (Male, Female; Students of European Descent, Student of Color; Standard Treatment, Augmented Treatment) measured across all intersections of other independent variable (Male, Female; Students of European Descent, Student of Color; Standard Treatment, Augmented Treatment); show no significant commonality of directional change, increase or decrease.

Ha (1): Males, Females who are Students of European Descent or Student of color, who live on or off campus, who have received the standard or augmented first year seminar course shows significant commonality of increase in mean score of the dependent variable.

Ha (2): Males, Females who are Students of European Descent or Student of color, who live on or off campus, who have received the standard or augmented first year seminar course shows significant commonality of decrease in mean score of the dependent variable.

A second question of interest involves whether or not any of the independent variables increase or decrease in cultural openness as measured by the cognitive or affective constructs of the Quick Discrimination Inventory (QDI). Using a two-tailed Students t test, the question of do pre and post mean score differences, show significant magnitude of change (increase or decrease) when measured either cognitively or affectively by the QDI for any intersection of independent variable levels; Students of European Descent or Student of color, female or male, on or off campus, standard or augmented treatment?

Ho: M pretest equals M posttest

Ha: M pretest does not equal M posttest

In pursuing research in this field a newly considered phenomenon is suspected. It may be that there are “reversible subjects”. For example reversible subjects are those students who measure high in cultural openness pre-test but reverse their scores post-test scoring low, while other subjects in the same group score low pre-test and reverse their scores scoring high post-test after the treatment which results in little to no mean change

for the entire group. This would result in what looks like no significant effect from the treatment took place, however significant changes could have occurred that were hidden by these reversible subjects.

There are two easily conceived potential causes for this “reversible subject” effect. One might be subject to feelings of guilt about some of one’s racially related thoughts or perhaps even some occasional race related actions. These thoughts or feelings could be susceptible to change when exposed to a standard lesson or an Allport based amplified lesson on diversity. The other cause might be subject to feelings of frustration because they have tried to embrace what is politically correct and it has been difficult for them to do so. People may even harbor some resentment about issues of race and treatments, like those of this study, which represent a “push to far” causing subjects to slide into a reversal of thought or emotion. When two such subjects occur in the same group then the combination of the two in the same cell (that is, people who have opposing responses to the treatment) would allow very substantial change within the cell which might not be manifest by an observable significant change in mean. For instance in the cell Students of European Descent females living on campus receiving the augmented first year course one of the students may have scored with high openness in the affective measure pre-test but reversed to very low openness post-test while another student did the exact opposite thereby having significant responses to the treatment. This situation would not be reflected in the mean scores for the group causing a type II error. Although this study is not primarily focused on this phenomenon, it is an excellent opportunity to screen for it, because this phenomenon is relevant both to questions of this study and to practical problems affecting this class of intervention in the field.

In order to test for this after the pre-tests, individuals in each group were ranked ordered by cognitive or affective measure scores. After treatment the post-test scores were ordered by the sequence of names established in the pretest score ranking. These scores are correlated with the pretest score means. Other useful descriptors were also calculated. Correlations and means were matched and compared.

This phenomenon can be addressed by another research question using a Pearson correlation and answering the question: Do correlation between pretest ranked score vectors and post-test ranked score vectors, measured within all intersections of the independent variables, appear to be very low, low, medium, or high? As in $0 < r < .25$ is very low, $.25 < r < .50$ is low, $.50 < r < .75$ is medium, and $> r > .75$ is high. Very low and low correlations in these scores indicate the reversal effect.

Ho: correlation = 0

Ha: correlation > 0

Instruments

Quick Discrimination Inventory

Dependent variables were measured by the Quick discrimination Inventory, which is usually referred to by the acronym QDI (Appendix A). The QDI was developed to measure attitudes toward racial diversity and gender equity (Ponterotto et. al. 1995; Utsey & Ponterotto, 1999).

The QDI measures a cognitive construct toward race (“what they believe”), and affective construct toward race (“what they feel”), and general perspectives toward gender equity. The instrument contains 30 items, nine of which measure the cognitive construct, seven measure the affective, and seven measure the gender equity subscale.

Seven additional items are included because they contribute to the overall internal consistency of the measure as well as to its content validity. The last seven items do not load on any particular subscale in factor analysis, however (Ponterotto, Potere, & Johansen, 2002).

Coefficient alphas for all factors in every assessment measured between satisfactory and strong (Ponterotto et al. 1995a; Ponterotto and Utsey 1999a; Ponterotto, et al., 2002). Content validity, internal consistency, reliability, criterion related validity, and convergent/divergent discrimination validity are all clearly present (Ponterotto et al., 1995, Ponterotto et. al.,2002).

All measures of convergent/divergent discrimination validity were exhaustively thorough. The QDI was assessed against the New Racism Scale (NCS), the Multicultural Counseling Awareness Scale (MCAS), and the Social Desirability Scale (SDS) (Ponterotto, 1995). In an effort to establish convergent and discriminant validity Ponterotto, et al., (2002) "...summarize subscale correlations with other measures across multiple studies" (p.199). Chronback alphas were studied and found to range from .80 to .90 (median = .85) for subscale 1(cognitive racial) and from .70 to .90 (median = .85) for subscale 2 (affective racial) (Ponterotto, et al., 2002). Factor 3 (attitudes toward gender) had an alpha range of .47 to .76 (median = .71) (Ponterotto et al., 2002). [Please note that, attitudes towards gender are not part of this study and data relating to them appear only in appendix B.] Ponterotto et al. (1995) measured stability coefficients across three studies and found for factor 1, these were .82, .92, and .96 (mean =.90). For factor 2 these were .65, .95, and .87 (mean = .81). Subscale inter-correlation was also summarized by Ponterotto et al. (2002) and found the QDI total scale score correlated to its subscale

scores as follows: subscale 1 .83, subscale 2 .72, and subscale 3 .74 which are considered highly significant. Independent subscale scores ranged as follows; subscale score 1 to subscale score 2 correlations had a mean of .44, subscale score 1 to subscale 3 correlations had a mean of .54 and subscale 2 to subscale 3 had a correlation mean of .36 which indicate moderate correlations (Ponterotto et al., 2002).

The validity and reliability of QDI, particularly the subscales relevant to this study, have been thoroughly established using the most rigorous empirical procedures (Ponterotto et al., 2002).

It is recommended that researchers using the QDI use only the subscale scores instead of the overall QDI score (Ponterotto, et al. 2002). It is also recommended that when using only some of the subscale scores that the entire QDI be administered and scored (Ponterotto, et al., 2002). This study follows that recommendation.

A demographic instrument was also used to collect a range of information (Appendix F).

Assumptions and Significance

The QDI's thorough validation established a meaningful distinction between relevant factors (Cognitive and Affective) of the instrument. However, because this study is especially interested in the cognitive/affective distinction it is assumed that a potential for non-critical but measurable factor intersections exists and a special protection against factor intersection will be employed.

Specifically, the probability levels protecting against random occurrence appropriate to this study are .05, .005, and .0005. However, to compensate for any possible intersection, all observed probabilities will be doubled. That is, an observed

probability of .03 would be considered to represent a possible accumulated probability of .06, and the null hypothesis would be accepted.

This technique is a common protection against those accumulated probabilities, which could occur when an instrument contains constructs that might show some degree of overlap. Such situations usually represent a relatively small intersection, which makes this adjustment extremely conservative as it compensates for a complete intersection that is 100% overlap.

The Participants

The participants were recruited from a small southeastern liberal arts university offering a total of 15 First year seminar classes. All first year seminar classes included discussion about racial diversity and acceptance of differences.

This university is noted for its relatively high (for the region) minority enrollment at approximately 30%.

This university, at the time this study was conducted, was ranked 10th in the South as a regional university with one of the most diverse student bodies as reported in a news release by the university public affairs office (“FMU again ranked as having diverse student body”, 2000).

There were 97 participants in total, 33 males, 64 females, 66 Students of European descent, 31 Students of Color, 64 living on campus, and 23 living off campus. Of the male Students of European descent 17 live on campus and 6 live off campus, while of the male Students of Color all 10 live on campus with no male Student of Color living off campus. Of the female Students of Color all 21 live on campus and none live off campus,

while the female Students of European descent have 26 living on campus and 17 living off campus (Table 1).

There were 17 Students of Color in the standard treatment and 14 in the augmented treatment; there were 37 Students of European Descent in the standard treatment and 29 in the augmented treatment (Table 2).

Treatments

The standard treatment consists of the usual first year seminar as defined by previous syllabi of the individual first year course instructors. The standard treatment does not include a specific within course workshop or seminar on multicultural or diversity issues other than what might normally be covered in a first year seminar course

The Augmented first year seminar course received a special Multifaceted Multicultural Seminar (MMS) during 3 hours of course instruction. This seminar was based on Allport's Contact Hypothesis (Seminar full description Appendix C). This seminar relies on the use of the movie *Skin Deep* (1995), a film that focuses on the experiences of a diverse group of college students as they honestly confront each other on their racial prejudices. I selected this film because the students in my study could relate to the practical, almost raw method by which the students in the film address these sensitive issues. The film was developed specifically to help college students address these issues of cultural openness. (Skin Deep: Facilitators Guide, 1995). The Multifaceted seminar shows the movie to the Augmented first year seminar students in one class period which is followed by a facilitator led class discussion (Appendix D) of the film in a second class period and finally the students are given a cooperative task (Appendix E)to complete in the final class period of the MMS. The strength of using video in addressing multicultural

education and addressing diversity issues have been well documented (Soble, Spanierman, & Liao, 2011).

It was decided that approximately half of the first year seminar classes (8) would participate in the study and these classes were randomly assigned to the Augmented First year seminar and Standard first year seminar groups.

Analysis Across

Fortunately, use of a probability measure is particularly rigorous. Each Independent Variable must show either an increase or decrease in the dependent variable but none of the independent variables is affected by the other independent variables (much as a flipped coin must show either heads or tails). These events are *statistically* independent. That is, the occurrence of one is not dependent upon the occurrence of another (as with a flipped coin the appearance of a head is not dependent upon the previous appearance of a tail). Obviously, this is so with more sophisticated measures that is both simultaneous and secret.

As either increase or decrease can be represented by either A or B it is true that, across any possible sequence, the probability of A and B occurring is equal to the probability of A times the probability of B. That is $p(A \text{ and } B) = p(A)p(B)$. These probabilities, for observed sequences of increase in cultural openness and decrease in cultural openness, will be calculated across each Independent Variable under both the cognitive measure and the affective measure. It is expected that no sequence of Independent Variable will have all increases or all decreases in cultural openness in either the cognitive or affective measure of the QDI.

Analysis Within

Pretest means and standard deviations, posttest means and standard deviations, difference means and standard deviations, t-tests of the difference means, and correlation between score ranked pretest vectors and posttest vectors will be calculated for every intersection of each level of Independent variable. The statistics will be calculated for all intersections of Augmented Treatment, Standard Treatment, Students of European Descent, Students of Color, On-campus housing, Off-campus housing, Male gender, and Female gender.

Standard interpretations of Students t-tests apply to analysis within hypotheses. The statistical significance, of Standard Treatment (A) and Augmented Treatment (B) induced changes (based on pre/post difference means), were established within each intersection cell.

Pearson correlation coefficients can provide information concerning a newly conceived Type II error. That is, if a larger number of reversals, both up and down occur within the same cell, it is possible for considerable change to occur within that particular cell that does not produce a large change in mean or standard deviation of that cell. This effect would be of special interest because of strangeness.

Perspective

Both sets of analyses are extremely straightforward, simple, and very conservative. To some degree, this will increase the likelihood of Type II error (an overlooked relationship that is significant by standards less rigorous than those applied to

Table 3.2
Participant breakdown by independent variable

	Males	Females	Students of Color	Students of European Descent	On Campus	Off Campus
Males	33		10	23	27	6
Females		64	21	43	47	17
Students of Color					31	0
Students of European Descent					43	23
Standard Treatment	20	34	17	37	44	10
Augmented Treatment	13	30	14	29	30	13

the relationships of discovered significance). However, this very conservative approach is justified for social and economic reasons.

A very conservative approach is needed because it is possible that results of this study could seriously call into question, for institutions similar to that of this study, both the effectiveness and cost-effectiveness of first year programming aimed at improving attitudes toward racial diversity. Moreover, should this occur, questions would be raised about cultural openness programming in any institution.

CHAPTER 4

Results

Assessing the effectiveness of multicultural education attempts on first year college students is important in order to help colleges and universities design ways to jump start students' openness to diversity issues early in their matriculation. This study assesses the impact of an augmented first year seminar course which uses a Multifaceted Multicultural Seminar based of three components of Allport's Contact Hypothesis against a standard first year seminar course. This study looks to evaluate whether or not either treatment affected cultural openness in either the cognitive or affective measures of the QDI in the students who participated.

Overview

Based on the results of t tests significant pre-post uniformity of change, significant pre-post magnitude of change, and interesting (very low, low, and medium) pre-post correlations were observed. There were two examples of significant uniformity of change under the Affective Measures, one example of significant magnitude of change under the Affective Measures, and a few examples of interesting correlation suppression under both the Cognitive and Affective measures. A probable Type II error also occurred under the Affective Measures for magnitude of change. A substantial majority of the null hypotheses were accepted. However, those that were not accepted were rejected at high levels of significance.

Affective Dependent Variables Measured Across All Intersections of Independent Variables

Hypothesis 1

Significant pre-post uniformity of change was observed only under the Affective Measure (Table 3) and then only across both levels of the independent variable “Gender”. The Male level showed, with *no* exceptions, small increases. The Female level showed, with *no* exceptions, small decreases. Consequently, the observed probabilities of random occurrence were *very low*. For each level (male or female), individually, $p=.016$. For both levels, together in sequence (male and female), $p=.00026$. Therefore, the possible accumulated probabilities are, $.032^*$ individually and $.00052^*$ together in sequence. The chances that all male mean scores across every intersection of independent variable would increase and that all female mean scores across every intersection of independent variable would decrease are very low. This result indicates that something occurred during this first semester for male students to increase in cultural openness and female students to decrease in cultural openness.

The two independent variable “Race” which include Students of European Descent and Students of Color, the two independent variable “Housing” which include on-campus and off-campus, and the two independent variable “Treatment” which include Standard and Augmented Treatment had equal increases and decreases resulting in no significant pre-post uniformity of change. In other words the null hypothesis that mean

scores for these independent variables would not all increases or decrease was not rejected (Table 3).

Cognitive Dependent Variables Measured Across All Intersections of Independent Variables

Hypothesis 1

As noted above no significant pre-post uniformity of change was observed under the cognitive measure.

However, a movement in the direction of significant pre-post uniformity of change, but failing significance, was observed under the Cognitive Measure at the Students of European Descent level of independent variable labeled “Race” (Table 4). The observed probability of random occurrence was .06 which would be close to flagging a type II error, however, its accumulated probability is .12. The Student of Color level had no pre-post uniformity of change with a difference of 0.

The independent variable “Gender” with levels male and female and the independent variable “Housing” with levels on and off campus had observed probabilities of random occurrences at .25 and were not significant.

Affective Dependent Variables measured Within All Intersections of the Independent Variables

Hypothesis 2

Significant pre-post magnitude of change with a two-tailed t value of 4.70 was observed only under the Affective Measure and then only in the intersection cell labeled “Female, Students of European Descent, Off-Campus, Augmented Treatment” (Table 5). However,

Table 4.1

Measure: Affect

Independent Variables	Increase	Decrease	Difference	ρ
Male	6	0	6	.02*
Female	0	6	-6	.02*
Students of European Descent	4	4	0	
Students of Color	2	2	0	
On-Campus	4	4	0	
Off-Campus	2	2	0	
Stand. Treatment	3	3	0	
Aug. Treatment	3	3	0	
Σ	24	24		

Note. $\alpha = .025$

Table 4.2

Measure: Cognitive

Independent Variable	Increase	Decrease	Difference	ρ
Male	2	4	-2	.25
Female	2	4	-2	.25
Students of European Descent	2	6	-2	.06
Students of Color	2	2	0	
On-Campus	3	5	-2	.25
Off-Campus	1	3	-2	.25
Stand. Treatment	2	4	-2	.25
Aug. Treatment	2	4	-2	.25
Σ	16	32		

Note. $\alpha = .025$

the probability of random occurrence was low: with observed probability of $p < .02$. (Table 5)

Possible pre-post magnitude of change Type II error was observed only under the Affective measure and then only in the intersection cell labeled “Female Students of European Descent, On-Campus, Augmented Treatment”. The probability of random occurrence was low enough to reject null under the observed probability; $p .05$, but not low enough to reject null under the study’s conservative decision to employ possible accumulated probability: $p < .10$ (Table 5).

No other significant pre-post magnitude of change in the affective measure in the “Male” or “Female”, On or Off campus, Student of European or Student of color, or Standard Treatment or Augmented Treatment independent variables occurred (Tables 5 & 6).

Cognitive Dependent Variables Measured within All Intersections of the Independent Variables

Hypothesis 2

No significant pre-post magnitude of change was observed under the Cognitive measure and no likely pre-post magnitude of change Type II was observed under the Cognitive Measure (Table 7 & 8).

Table 4.3

Affective Measure: Female Sample

Race/Residence/Treatment	Survey	N	M	S	t	α	r
Students of European Descent /On-Campus/ Standard	Pre	15	21.33	6.66			
	Post	15	21.20	6.22			
	Difference	0	0.13	2.55	.202	.843	.923
Students of European Descent/ On-Campus/ Augmented	Pre	11	21.09	4.34			
	Post	11	19.18	4.95			
	Difference	0	1.90	2.77	2.28	.046*	.831
Students of European Descent/ Off-Campus/ Standard	Pre	7	19.85	5.24			
	Post	7	19.57	4.11			
	Difference	0	0.28	1.97	.383	.715	.939
Students of European Descent/ Off-Campus/ Augmented	Pre	10	20.80	4.16			
	Post	10	19.20	4.39			
	Difference	0	1.60	1.07	4.70	.001**	.970
Students of Color /On-Campus/ Standard	Pre	12	24.25	4.99			
	Post	12	23.92	4.68			
	Difference	0	0.33	3.08	.374	.715	.799
Students of Color/On-Campus/ Augmented	Pre	9	28.89	3.98			
	Post	9	28.11	4.51			
	Difference	0	0.78	4.18	.559	.592	.522

Table 4.4

Affective Measure: Male Sample

Race/Residence/Treatment	Survey	N	M	S	t	α	r
Students of European Descent/ On-Campus/Standard	Pre	12	20.75	5.74			
	Post	12	20.83	5.70			
	Diff	0	-0.08	2.71	-0.106	.917	.888
Students of European Descent/ On-Campus/ Augmented	Pre	5	23.20	2.68			
	Post	5	23.60	2.88			
	Diff	0	-0.40	1.82	-0.492	.648	.789
Students of European Descent/ Off-Campus/ Standard	Pre	3	19.00	9.54			
	Post	3	22.00	9.54			
	Diff	0	-3.00	1.73	-3.00	.095	.984
Students of European Descent / Off-Campus/ Augmented	Pre	3	19.00	5.57			
	Post	3	19.33	7.57			
	Diff	0	-0.33	3.79	-0.152	.893	.878
Students of Color/On-Campus/ Standard	Pre	5	23.60	4.04			
	Post	5	24.60	2.41			
	Diff	0	-1.00	2.24	-1.00	.374	.879
Students of Color/On-Campus/ Augmented	Pre	5	22.60	2.30			
	Post	5	23.40	1.67			
	Diff	0	-0.80	2.77	-0.675	.554	.052

Suppressed (Reversible Subjects) Correlations

Hypothesis 3

In the Affective Measure “Female” there was one instance of suppressed pre-post correlation and five instances of high correlations:

- 1) a medium correlation [.52] under the cell labeled “Female, Student of Color, On-Campus, Standard Treatment” (Table 5);
- 2) a high correlation [.92] under the cell labeled “Female, Student of European Descent, On-Campus, Standard Treatment” (Table 5);
- 3) a high correlation [.83] under the cell labeled “Female, Student of European Descent, On-Campus, Augmented Treatment” (Table 5);
- 4) a high correlation [.94] under the cell labeled “Female, Student of European Descent, Off-Campus, Standard Treatment” (Table 5);
- 5) a high correlation [.97] under the cell labeled “Female, Student of European Descent, Off-Campus, Augmented Treatment” (Table 5); and
- 6) a high correlation [.80] under the cell labeled “Female, Student of Color, On-Camps, Standard Treatment” (Table 5).

In the Affective Measure “Male” there were one instance of suppressed pre-post correlation and five instances of high correlations ;

- 1) a very low correlation[.05] under the cell labeled “Male, Race Students of Color, On-Campus, Augmented Treatment” (Table 6);
- 2) a high correlation [.79] under the cell labeled “ Male, Students of European Descent, On-Campus, Augmented Treatment” (Table 6);

- 3) a high correlation [.89] under the cell labeled “Male, Student European Descent, On-Campus, Standard Treatment” (Table 6);
- 4) a high correlation [.98] under the cell labeled “Male, Student of European Descent, Off-Campus, Standard Treatment” (Table 6);
- 5) a high correlation [.88] under the cell labeled “Male, Student of European Descent, Off-Campus, Augmented Treatment” (Table 6); and
- 6) a high correlation [.88] under the cell labeled “Male, Student of Color, On-Campus, Standard Treatment” (Table 6).

Suppressed correlation was twice as common under the Cognitive Variable as under the Affective Variable.

There were four instances of suppressed correlation in the Female cognitive category and two instances of high correlations:

- 1) a medium correlation [.55] under the cell labeled “Female, Student of Color, On-Campus Augmented Treatment” (Table 7);
- 2) a medium correlation [.67] under the cell labeled “Female, Students of European Descent, Off-Campus Augmented Treatment” (Table 7);
- 3) a medium correlation [.70] under the cell labeled “Female, Students of Color, On-Campus Standard Treatment” (Table 7);
- 4) a low correlation [.30] under the cell labeled “Female, Students of European Descent, Off-Campus Augmented Treatment” (Table 7);

- 5) a high correlation [.84] under the cell labeled “Female, Student of European Descent, On-Campus Standard Treatment” (Table 7).and
- 6) a high correlation [.75] under the cell labeled “Female, Student of European Descent, On-Campus, Augmented Treatment” (Table 7).

Under the Cognitive Measure for “Male” independent variable there were three instances of suppressed correlation and three instances of high correlations:

- 1) a very low correlation [.08] under the cell labeled “Male, Students of Color, On-Campus Standard Treatment” (Table 8);
- 2) a low correlation [.31] under the cell labeled “Male, Student of European Descent, On-Campus, Standard Treatment” (Table 8);
- 3) a medium correlation [.67] under the cell labeled “Male, Students of Color, On-Campus Augmented Treatment” (Table 8);
- 4) a high correlation [.98] under the cell labeled “Male, Student of European Descent, On-Campus, Augmented Treatment” (Table 8);
- 5) a high correlation [.80] under the cell labeled “Male, Student of European Descent, Off-Campus, Standard Treatment” (Table 8); and
- 6) a high correlation [.98] under the cell “Male, Student of European Descent, Off-Campus, Augmented Treatment” (Table 8).

Table 4.5

Cognitive Measure: Female Sample

Race/Residence/Treatment	Survey	N	M	S	t	α	r
Students of European Descent/ On-Campus/Standard	Pre	15	26.53	4.96			
	Post	15	26.93	5.12			
	Diff	0	-0.40	2.84	-.544	.595	.841
Students of European Descent/ On-Campus/ Augmented	Pre	11	26.91	3.05			
	Post	11	24.82	5.10			
	Diff	0	2.09	3.48	1.99	.074*	.746
Students of European Descent/ Off-Campus/ Standard	Pre	7	26.00	3.11			
	Post	7	25.42	5.50			
	Diff	0	0.571	4.11	.367	.726	.672
Students of European Descent/ Off-Campus/ Augmented	Pre	10	25.40	3.50			
	Post	10	24.20	4.73			
	Diff	0	1.20	4.98	.761	.466	.296
Students of Color/On-Campus/ Standard	Pre	12	30.83	2.44			
	Post	12	30.50	3.58			
	Diff	0	0.33	2.57	.449	.662	.696
Students of Color/On-Campus/ Augmented	Pre	9	31.78	2.59			
	Post	9	32.33	4.47			
	Diff	0	-0.56	3.75	-0.445	.668	.547

Table 4.6

Cognitive Measure: Male Sample

Race/Residence/Treatment	Survey	N	M	S	t	α	r
Students of European Descent/	Pre	12	23.25	2.38			
On-Campus/Standard	Post	12	22.5	3.15			
	Diff	0	.75	3.31	.786	.449	.31
Students of European Descent/	Pre	5	25.80	3.63			
On-Campus/ Augmented	Post	5	25.20	6.42			
	Diff	0	.60	2.97	.452	.675	.978
Students of European Descent/	Pre	3	28.00	5.20			
Off-Campus/ Standard	Post	3	23.67	5.03			
	Diff	0	4.33	3.21	2.34	.145	.803
Students of European Descent/	Pre	3	24.00	7.00			
Off-Campus/ Augmented	Post	3	27.33	7.64			
	Diff	0	-3.33	1.53	-3.78	.063	.982
Students of Color/On-Campus/	Pre	5	31.80	1.92			
Standard	Post	5	33.40	3.71			
	Diff	0	-1.60	4.04	-.886	.426	.084
Students of Color/ On-Campus/	Pre	5	32.20	4.60			
Augmented	Post	5	31.00	5.10			
	Diff	0	1.20	3.96	.677	.535	.67

Summary

The experimental questions have been answered for both cognitive and affective dependent variables, measured within and across all cells. In addition a suspected phenomenon has been observed. The data contains evidence of suppressed correlation. Suppressed correlation represents meaningful within cell change *not* reflected in a cell's pre-post mean change because *there are within cell differences that mutually cancel in summation*.

If total measured within cell mean changes are not further interpreted by related correlations, these mutually canceling changes can obscure the real total change in a way that might lead to meaningful Type II errors.

CHAPTER 5

Discussion

It is dramatic that in the Affective category all males showed an increase to openness in racial attitude regardless of treatment, race, or living condition while all the females showed a decrease in racial attitude openness regardless of treatment, race, or living condition. Each of these results individually would have a low probability of occurring, therefore the fact that they both occurred in the same study indicates a very very low probability of occurrence.

Why did the males' affective (feelings) of openness increase while the females' affective openness decrease? Possible answers for this may lie in how much exposure both the males and females have to persons from races differing from their own. Does the first taste of independence from family influence effect general openness or questioning of previously held beliefs? Could it be that the males of this sample have had more opportunity to interact in some team sport with other males who have different racial backgrounds and therefore the males in this study were more likely to show an increased feeling of openness about people from other races?

All of the males regardless of independent or dependent variable increased in the affective measure of the QDI. What occurred during the first semester of college that would create an increase in affective openness in males regardless of the treatment conditions?

Reviewing the studies of racial cultural openness and openness in males show that men are typically less receptive to issues of openness overall than females (Bowman & Denson, 2011). It may be that males lack of openness precollege may be more greatly challenged in such a way that it provides for more growth due to the resulting disequilibrium of interacting more closely with students who differ from themselves (Brown & Denson, 2011). The first semester may have afforded the males in this study more eye-opening experiences to the issue of race which resulted in an affective opening up to cultural differences.

This initial change in feeling toward more openness for the males of this study may also be a function of racial identity development. As noted in chapter two, both People of European descent and People of Color go through developmental processes in their racial identity development. College students achieve higher levels of ethnic identity than younger adolescents thereby gaining a more secure sense of self as ethnic group members (Phinney, 1992; Phinney & Chivera, 1992). It could be possible that the first semester of college provides males a sense of greater freedom and independence which allows them to begin to challenge their previously held feelings about all of their values. This freedom to think for oneself, to make independent decisions without the direct influence of parents, may generate an overall more open attitudes or feelings in general with a crossover effect occurring in racial affective attitudes.

In a study on second and third year influences of student openness to diversity Whitt et al. (2001) found several factors that positively influence cultural openness. Of these factors pre-college openness to diversity was found to be the most significant predictor of college openness. It is possible that the males involved in this study had

higher levels of pre-college openness to diversity than the females in this study. The males in this study may have had pre-college experiences, such as long term participation in team sports, or more acquaintances with diverse backgrounds that positively influenced their pre-college openness levels thereby positively influencing their affective measure post-test on the QDI in this study.

All Female affect measures showed small decreases regardless of independent or dependent variable. Could the nature of what occurs during the acclimation to college life in the first semester of college negatively influence females feelings about racial openness? Why would females' feelings in this sample, over the course of the first semester of college, toward racial openness decrease? What variables could occur that would cause women to decrease in openness about racial issues?

Females tend to demonstrate higher levels of cultural openness upon entering college than do males (Taylor, 1998). Taylor (1998) also found that pre-college socialization experiences combined with the effects of selected college experiences tend to produce an overall increase in female cultural openness levels after two years of college. In a study on the effects of prejudice reduction in White students, Blinco & Harris (2009) found that the females in their sample scored higher in openness compared to the males in their sample. The results of this study found the opposite in just one semester of college experience. The females in this study may not have had enough pre-college or current college socialization experiences to impact their affect about racial cultural openness. Saenz (2010) found that "pre-college friendships can have disparate effects on students' levels of positive diversity experiences in college". Many of the students who attend this university come from the surrounding region which tends to be

suburban and rural which could explain how the females in this study may have had limited opportunity to interact with persons of different racial backgrounds in any long term or meaningful ways. While public schools in this southern region are integrated a strong aspect of self-segregation within southern schools and churches continues to exist. Both races go to school together, however they do not spend much of their leisure or free time with one another which contributes to not really knowing or knowing about one another.

Females in this sample might choose to be less open in their feelings due to their discomfort with confronting change in their lives. They allow fear of the unknown to scare them toward a more closed position with regard to persons of a different racial background. Peter Senge and Katrin Kaenfer (2000) state that change efforts can induce fear especially those changes that challenge long held beliefs and habits. The fears induced by change can lead to entrenching in the old habits and beliefs (Kets de Vries & Balazs, 1999). The female first year students in this sample may have been overwhelmed with the many changes they were facing with college and therefore felt their more strongly held beliefs about race challenged and reacted with resistance rather than acceptance.

Previous research indicates that peer influences can have both positive and negative effects on feelings of cultural openness. Positive influences include situations where students are given increased opportunity to interact to encounter new ideas and new people that differ from their previous experience (Whitt, Edison, Pascarella, Terenzini, and Nora, 2001). Negative influential factors include interactions that isolate students from encounters that include new ideas and different people (Whitt, Edison,

Pascareela, Terenzini, and Nora, 2001). The females represented in this study only had one semester of college and may not have had enough time to experience the necessary components of college life that would typically increase their affective feelings regarding racial diversity. Another component of this may be the lack of time to experience the deeper quality interactions required to truly effect student's affective reactions to diversity related experiences (Saenez. Ngai, & Hurtado, 2007).

College students' first semester is usually spent getting used to the rigors of college life. According to the contact hypothesis the more social contact with persons of a different race the more positive attitude, thus the opposite is true, the less contact the more negative attitude (DeCuzza, Knox & Zusman, 2006). The females in this study may not have had enough time to seek out the necessary interpersonal experiences needed to increase their feelings about racial attitudes. Females in this study may have sought out friendships with people who were similar to themselves as a way to decrease the amount of stress they were experiencing as a result of having to acclimate to college in the first place. Students are predisposed to seek peers, courses or course work, and social situations that accentuate their particular set of attitudes, beliefs and experiences (Saenz, 2010). By seeking out or staying close to people of their own race they could have been mitigating the effects of other stressors related to getting used to being in college. Their reduction in affect toward persons of a different racial background than their own could be a form of cognitive dissonance, a justification of their choice not to get to know people who are different than themselves.

A further possible explanation for the female reduction in affect could be that some of the female first year students may have sought experiences which act negatively

on racial cultural openness such as rushing a sorority. Many studies have found that Greek life has a negative impact on racial openness (Morris, 1991; Muir 1991; Saenz, 2010, Leon, 2010). College students pursuing Greek life on campus tend to self-segregate into same race groups thus reducing the chance for cross race social interaction.

Another explanation for the difference may be in the fact that this study separated affective attitudes from general cultural openness attitudes. How a person reports how they think and how they feel can be different. As in this study the cognitive component showed no significant change in any of the participants across or within any of the variables. Affective effects such as anxiety can mediate the relationship between contact and prejudice when group salience is high (Voci & Hewstone, 2003). This phenomenon could be further explored in future studies.

There was only one pre-post magnitude of change in this study. The females Students of European Descent's who live off-campus cultural openness in the affective measure was significantly influenced by the augmented treatment in such a way that it appears their initial level of openness was entrenched by the treatment. These student's means decreased significantly from pre to post-test after receiving the augmented treatment. While this result tends to go against what the research has found (Vaccaro, 2010), that females tend to increase in cultural openness during college, there may be some explanation for this. It may be that female students of European Descent do not really differ that much in their racial attitudes than that of their male counter parts. In a study attempting to determine if female of European Descent's racial attitudes differ about racial minorities from those of men of European descent, Hughes and Tuch (2003) found only small or nonexistent gender differences.

The issue of “White fear” may have had an effect in reducing the affective measure for female of European Descent. When people of European Descent tend to endorse attitudes of less cultural openness they express fear of people of color, or locations associated where people of color reside or work (Kordesh, Spanierman, & Neville, 2013). In a study on opposition to race targeted interventions Steven Stack (1997), found that women who have prejudicial attitudes, who live in the South and who reside in rural areas tend to rate higher in opposition to race targeted interventions. The females of European Descent, living off-campus, who participated in the augmented treatment may have started out with some level of “White fear”, more prejudicial attitudes, and may tend to live in rural areas which led to a decrease in cultural openness when confronted on the issue of cultural diversity in the augmented treatment.

Females of European Descent who live off-campus and received the augmented treatment in this particular study may have been affected by the video used in the augmented treatment. One of the female Student of European Descent who was involved in the video shown in the augmented treatment could have been seen as outspoken, with an irritating voice and was overly expressive which could have “turned off” the female Students of European Descent and resulted in a backlash toward cultural openness.

Females of European Descent who lived on campus and received the augmented treatment exhibited a possible type II error in magnitude of change, indicating that they too may have been affected in the affective measure by the treatment. While they did not meet the conservative accumulated probability $p=.10$ this result is interesting in that both cells of females of European Descent approached a significant result in the affective measure after receiving the augmented treatment. Their scores did decrease rather than

increase and this may indicate that something in the augmented treatment caused an entrenchment of their previously held cultural attitudes rather than an opening of cultural affect. These results are not typically supported by the research in that most of the previous research shows that women's attitudes tend to be more open than men's (Vaccaro, 2010).

Something in the augmented treatment affected female Students of European Descent in such a way that their scores decreased in an entrenchment of their pre-test attitudes. One possible explanation may be that when confronted with the fact that racism still occurs, and that as people of European Descent they have advantages because of privilege, the females of European Descent feelings exhibited a "push back" against this idea in this study. In other words a strong sense of denial that they themselves might be perceived as racist resulted in a decrease in cultural openness in the way they feel about diversity issues. The augmented treatment could have strongly challenged female Students of European Descents' color blind attitudes that made them perceive college racial climate as positive (e.g., Worthington, Navvarro, Loewy & Hart, 2008), in such a way that they entrenched this perception by endorsing less affective openness. It could be that when confronted about the issue of racism the females of European Descent felt attacked or that just discussing this issue creates more negative emotional intensity and highlights division rather than increasing openness (Price, Hyle & Jordan, 2009). This result would be worth further study.

For both categories female of European Descent who live on and off campus receiving the augmented treatment taking an initial course addressing diversity issues may not be enough to create growth in openness. Bowman (2010b) found that there was

no difference in comfort with differences between students who take one diversity course or those who take no diversity course. Bowman's (2010b) study suggests that students must take a multiple of courses in diversity to experience benefits in comfort with differences, an appreciation of similarities, and increase in contact with diverse peers.

In the area of suppressed correlation some very interesting results occurred. Suppressed correlation is based on the concept of a new kind of type II error. Classic Type II errors occur when samples have a relatively homogenous response but protection levels have been set too high for the power of the test. This occurs more commonly in the social sciences because of a greater incidence of complex variables, but also in the natural sciences. It is relatively easy to correct by increasing power levels and accepting less conservative protection.

However a different kind of Type II error is relatively likely in sociological and psychological studies especially when it comes to measures of volatile emotional topics, such as cultural diversity. It appears to be, in many situations, not even suspected and it cannot be corrected for with traditional techniques. I could find no research describing this effect in the literature however it makes reasonable sense that it does occur.

In a one version of this effect, in a group bipolar with regard to certain measured attitudes react oppositely to a treatment and reverse their measured attitudes. Enormous change has occurred in response to the treatment, but group mean score on the attitude measure may be unaffected. This produces a large Type II error that no adjustment of power or protection will affect.

The more common version of this effect, a group is heterogeneous with regard to certain measured attitudes. The group reacts oppositely to the treatment but in degrees of

opposition proportional to the strength of their original attitudes. The homogeneity of the group is maintained but the distribution of particular attitudes is reversed. As in the first example the group mean could be unaffected or little affected, even though great change has occurred. As before no power or protection will help.

An example of this Type II error is evident when there is a large change in profile and small change in mean. In this example the individuals who indicated a low score pre-test indicate a high score post-test while the high scorers pre-test lower their scores post-test. These change in scores do not produce a large group mean change, however the direction of the slope of scores are opposite pre-test and post-test. In this situation correlation of the pre/post test scores are low. It is important at this stage to look at individual scores and see how much variance exists between them to help identify who changed and to understand more fully why they changed. Just because the group mean did not change significantly it does not mean that the number of participants within the group did not change in an important way. An example of this is when participant scores go up and down in such a way that the slope of the profile is in the opposite direction pre/post-test, while the overall group mean remains close.

When group results indicate a significant mean change pre/post-test it indicates that the participants changed their responses in such a way that the entire group of participants increased or decreased their responses in a significant way. What is often unclear, when using paired participant responses, is how much each participant changed in degree of their response unless the group profile differences in how individual participants responded post-test when compared to pre-test, is studied. To study the group profile one must look at the correlation between the group responses. A low

correlation indicates that the slopes of the response sets are opposite and steeper in the pre and post-test scatter plots. A large mean change, combined with a low correlation of individual participant scores, indicate that the profile has changed in such a way that the participants scores changed in the same direction and the individuals who responded with low scores pre-test had higher scores and more variance in their responses than the participants who began with a high response set pre-test.

The results in this study indicated that a suppressed pre-post correlation occurred in the Affective measure with female Students of Color who live on campus that received the standard treatment and with Male Students of Color who lived on campus that received the augmented treatment. On the cognitive measure students' who received the standard treatment with low low, low or medium suppressed correlation results were the female students of color living on campus, male Students of color living on campus , male Student of European Descent living on campus, female Student of European Descent living on campus. Students who received the augmented treatment with low low to medium correlations suppressed correlations were female Student of Color living on campus, female Student of European Descent living off campus, and male Student of European Descent. This suppressed correlation response would be an example of the new Type II error revealing that significant changes within cells occurred that did not change the group means in a significant way. This could indicate that both the standard and augmented treatment influenced individual changes within the groups that cancelled each other in summation which indicate that significant within cell change occurred. While one treatment may not have produced more significant change over the other both may have had significant effect on cultural openness in both the cognitive and affective

measures of the QDI depending on the race, gender, and housing location of this group of first year students.

What is particularly interesting is that this suppressed correlation was more than twice as evident in the cognitive domain than the affective domain of the QDI. This may indicate that multicultural training can help college students to change their thinking about cultural differences. Bowman (2009) found that taking an introductory diversity course positively affect how students tend to think or prefer to think in relation to cultural issues. Bowman, (2010) found in a meta-analysis of College diversity experiences that college diversity experiences that include interaction with racial diversity are more strongly related to the cognitive development of college students. These studies support the findings in this study that diversity training positively influences how college students think about diversity issues.

This study employed two treatments, an augmented treatment based on Allport's necessary conditions of contact to increase cultural openness, and a standard first year seminar course to assess if first year college students cognitive and affective attitudes of cultural openness could be influenced. The results indicate that for this study the men's affective cultural openness increased and women's affective cultural openness decreased regardless of type of treatment, living condition or ethnicity. This result would benefit from further study in that there are few studies on cultural openness that assess the differences between men and women's cultural attitudes.

Other results indicated seem to support the fact that a "reversal effect" may exist that can lead to a Type II error not previously suspected or identified in the literature.

This interesting possibility requires more study with a larger variety of samples especially with topics where volatile psychological issues are being measured.

Understanding what works and what does not when attempting to influence cultural openness has long been assessed in order to help reduce both discrimination and prejudice in our society. Use of Allport's contact hypothesis has had mostly positive results when it has been incorporated into diversity and cultural awareness training (Pettigrew & Tropp, 2006). While this study did not find much support for a one semester augmented first year seminar over the standard first year seminar on the influence of cultural openness with this group of first year students the findings do indicate that something happened which influenced changes in their cultural openness. It is possible that the augmented course did not allow for enough time in collaborative contact. This study could be enhanced by having the students engage in longer term, more in-depth collaborative goal oriented contact such as volunteer or community service experiences outside of the classroom. Continued study on what helps to increase cultural openness can only help to influence the "what really works" in order to help colleges and universities develop course work and cultural awareness programming that will positively influence students multicultural development.

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APPENDIX A

Quick Discrimination Index

Social Attitude Survey

Please respond to all the items in the survey. Remember there are no right or wrong answers. The survey is completely anonymous, do not put your name on the survey. Please circle the appropriate number to the right.

	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1. I do think it is more appropriate for the mother of a newborn baby, rather than a father, to stay home with the baby (not work) during the first year.	1	2	3	4	5
2. It is as easy for women to succeed in business as it is for men.	1	2	3	4	5
3. I really think affirmative action programs on college campuses constitute reverse discrimination.	1	2	3	4	5
4. I feel I could develop an intimate relationship with someone from a different race.	1	2	3	4	5
5. All Americans should learn to speak two languages.	1	2	3	4	5
6. It upsets (or angers) me that a woman has never been President of the United States.	1	2	3	4	5
7. Generally speaking, men work harder than women.	1	2	3	4	5
8. My friendship network is very racially mixed.	1	2	3	4	5

9. I am against affirmative action programs in business.	1	2	3	4	5
10. Generally, men seem less concerned with building relationships than women.	1	2	3	4	5
11. I would feel O.K. about my son or daughter dating someone from a different racial group.	1	2	3	4	5
12. It upsets (or angers) me that a racial minority person has never been president of the United States.	1	2	3	4	5
13. In the past few years there has been too much attention directed toward multicultural or minority issues in education.	1	2	3	4	5
14. I think feminist perspectives should be an integral part of the higher education curriculum.	1	2	3	4	5
15. Most of my close friends are from my own racial group.	1	2	3	4	5
16. I feel somewhat more secure that a man rather than a woman is currently president of the United States.	1	2	3	4	5
17. I think that it is (or would be) important for children to attend schools that are racially mixed.	1	2	3	4	5
18. In the past few years there has been too much attention directed toward multicultural or minority issues in business.	1	2	3	4	5
19. Overall, I think racial minorities in America complain too much about racial discrimination	1	2	3	4	5
20. I feel (or would feel) very comfortable having a woman as my primary physician.	1	2	3	4	5

21. I think the president of the United States should make a concerted effort to appoint more women and racial minorities to the country's Supreme Court.	1	2	3	4	5
22. I think Students of European Descent people's racism toward racial minority groups still constitutes a major problem in America.	1	2	3	4	5
23. I think the school system, from elementary school through college, should encourage minority and immigrant children to learn and fully adopt traditional American values.	1	2	3	4	5
24. If I were to adopt a child, I would be happy to adopt a child of any race.	1	2	3	4	5
25. I think there is as much female physical violence toward men as there is male violence toward women.	1	2	3	4	5
26. I think the school system, from elementary school through college, should promote values representative of diverse cultures.	1	2	3	4	5
27. I believe that reading the autobiography of Malcolm X would be of value.	1	2	3	4	5
28. I would enjoy living in a neighborhood consisting of a racially diverse population (i.e. African American, Asian American, Hispanic, Students of European Descent).	1	2	3	4	5
29. I think it is better if people marry within their own race.	1	2	3	4	5
30. Women make too big a deal out of sexual harassment issues in the workplace.	1	2	3	4	5

APPENDIX B

Gender Measure Results

Gender Measure: Female Sample

Race/Residence/Treatment	Survey	N	M	S	t	α	r
White/On-Campus/ A	Pre	15	25.86	4.50			
	Post	15	25.20	5.55			
	Difference	0	0.666	3.28	.785	.445	.806
White/On-Campus/ B	Pre	11	24.90	2.91			
	Post	11	25.45	3.47			
	Difference	0	-0.545	2.77	-0.65	.528	.637
White/Off-Campus/ A	Pre	7	23.00	1.73			
	Post	7	21.71	2.62			
	Difference	0	1.28	1.70	1.99	.093	.769
White/Off-Campus/ B	Pre	10	26.30	3.83			
	Post	10	24.60	4.38			
	Difference	0	1.70	2.36	2.27	.049*	.843
Non-White/On-Campus/ A	Pre	12	26.58	3.75			
	Post	12	25.08	3.42			
	Difference	0	1.50	2.28	2.28?	.043*	.803
Non-White/On-Campus/ B	Pre	9	27.89	2.52			
	Post	9	27.00	2.78			
	Difference	0	0.89	1.96	1.35	.212	.730

Gender Measure: Male Sample

Race/Residence/Treatment	Survey	N	M	S	t	α	r
White/On-Campus/ A	Pre	12	18.08	3.50			
	Post	12	17.42	3.00			
	Diff	0	.67	3.26	.709	.493	.507
White/On-Campus/ B	Pre	5	21.20	7.05			
	Post	5	20.40	8.20			
	Diff	0	.80	2.77	.645	.554	.945
White/ Off-Campus/ A	Pre	3	19.33	5.13			
	Post	3	18.67	3.79			
	Diff	0	1.60	1.07	4.70	0.001**	.970
White/ Off-Campus/ B	Pre	3	20.00	6.00			
	Post	3	20.33	7.37			
	Diff	0	-0.33	2.52	-0.229	.840	.950
Non-White/On-Campus/ A	Pre	5	19.60	1.67			
	Post	5	21.20	2.59			
	Diff	0	-1.60	3.13	-1.14	.317	.035
Non-White/ On-Campus/ B	Pre	5	21.20	3.42			
	Post	5	21.40	2.51			
	Diff	0	-0.20	2.39	-0.187	.861	.716

APPENDIX C

Seminar Description

The Seminar was conducted by two counseling professionals who worked for the Student Development Office of the University. Seminar instructor A was African American, Female, and worked in the office of Minority Student Services. Seminar Instructor B was Students of European Descent, Female and worked as Assistant Director of Counseling and Testing. The instructors were randomly assigned to classes which were randomly picked to receive the seminar.

The seminar consisted of showing the video “Skin Deep”. This video was produced to help college students address the issue of racial differences among college age persons. It included interviews of various college students from different racial and economic backgrounds who attended a weekend experience designed to discuss race and personal views about race. “Skin Deep will trigger thoughtful discussion and encourage students to address the deep-seated barriers to building a campus climate which respects diversity. It is ideal for student development, residential life, counseling, and staff diversity training as well as courses in sociology, psychology, education, and ethnic and multicultural studies (<http://www.newsreel.org/nav/title.asp?tc=CN0085>)”. The video lasted (53) minutes.

Upon the completion of the video the instructors lead the class in a guided discussion about their experience of the video. Issues of race were discussed as indicated

by the guided discussion sheet and class members were given the opportunity to share their experiences in small groups and with the larger class.

The final portion of the seminar, completed in the () class, consisted of dividing the class into racially diverse groups and given an assignment to design and build a bridge out of newspaper that can support the weight of brick and be tall enough to allow the brick to pass under it. This group exercise was designed to give the student participants an experience of working together toward a common goal in order to meet Allport's construct of cooperation.

APPENDIX D

Skin Deep Reaction Worksheet

Directions: Answer the following questions with honesty and thoughtfulness.

1) Describe which person in the video Skin Deep you most identify with and detail why you identify with them.

2) Which person in the video Skin Deep did you least identify with? Please explain why.

3) What message do you think stood out the most in the video Skin Deep?

4) Which person from the video Skin Deep had experiences most similar to events that have occurred in your life?

5) Do you consider gaining greater understanding of issues of race, gender, sexual identity and cultural heritage important for gaining success in today's world?

6) Has the video Skin Deep had any impact upon any preconceived ideas or beliefs you may have had prior to watching the video?

7) Do you feel that anything you may have learned from watching the video Skin Deep will affect the way you behave toward people who come from different racial, sexual, gender or cultural traditions than your own?

APPENDIX E

Directions for Building Bridges Exercise

Building Bridges

Supplies:

Stacks of used newspaper
1 Brick
5 Scissors
5 pads of paper

5 Large rolls of Masking Tape
5 Rolls of string
5 Bottles of glue
Pencils

Directions:

- 1) Separate the class into 4 or 5 heterogeneous groups, insuring a mixture of race, gender and cultural heritage.
- 2) Read the following directions: Each group is to build a bridge out of the materials they will be given. The groups must use 10 full minutes to discuss and plan their bridge prior to actually building the bridge. Each group will then have 10 minutes to build the bridge. The bridge must be strong enough to support the weight of the brick for at least one minute and must be high enough to allow the brick, standing on its side, to pass under it if the bridge is to pass inspection. This is not a competition between groups, the goal is for every group to successfully build a bridge of their own design.
- 3) The group leader will tell each group when to start planning and when to start building.
- 4) After the 20 minute time period is over the group leader will inspect each bridge by placing the brick in the middle of the span and by attempting to pass the brick under the span. Bridges that are tall enough to allow the brick to pass under them and that are strong enough to support the weight of the brick for one minute pass inspection.
- 5) Debrief with the following questions:
 - a) Do you feel your group used its planning time wisely and efficiently?
 - b) Do you feel all members in your group listened to everyone's ideas or suggestions equally? Why or Why not?
 - c) Did the females in the groups feel that their ideas and opinions were taken seriously by other members in the group?

- d) Did every member of the group participate equally in the planning and building stages?
- e) If a member of the group did not participate equally, please indicate your reasons for not contributing as much as others in the group.
- f) How did leaders of each group get chosen? Were the other group members comfortable with the leadership style of the person who emerged as the leader?
- g) Do you think that the group you worked with could be successful in future cooperative projects?
- h) Would you want to work on another task with the same people in your group?

APPENDIX F

Demographics Collected

Please indicate your gender. Male Female

Are you currently: Single Married Separated/Divorced

Please indicate if you are one of the following: Veteran Disabled Mature student(25 or older)

Do you receive financial assistance? Yes No

If yes do you receive a Pell grant Student loan Scholarship Work-study?

Do you currently live On Campus At home Off Campus (other than home) ?

Are you planning or currently involved in any of the following university sponsored organizations or activities? Sorority Fraternity Special interest organization

Student Government

Campus Religious Organization Campus sponsored club/organization

Intramurals FMU team sports Theater Music group or ensemble

How many hours do you spend involved in extra-curricular activities per week?

1-5 6-10 11 +

How beneficial do you believe involvement in university sponsored activities or organizations are to the university life experience? not beneficial a little beneficial

moderately beneficial very beneficial extremely beneficial

Please indicate your race: African American Asian Caucasian

Hispanic/Latino Native American Other (please specify)_____

Please circle how many credit hours you are currently enrolled. 1-9 10-12 15-18

18+

What is your current status? First year Sophomore Junior Senior

Are you a recent transfer student? Yes No